Clinical Lectures
ON
HEART DISEASE IN CHILDREN.

Delivered at the Hospital for Sick Children, Great Ormond-street,

BY W. B. CHEADLE, M.D., F.R.C.P.,
SENIOR PHYSICIAN TO THE HOSPITAL, PHYSICIAN TO ST. MARY'S HOSPITAL.

LECTURE I.

GENTLEMEN,—At first sight it might appear as if there could be nothing specially distinct and notable in the diseases of the heart in children; nothing in which they differed sufficiently from the same affections in adult life to render them worthy of separate notice. Children suffer from endocarditis and pericarditis, from common valvular affections, aortic, mitral, tricuspid, just as grown persons do; they suffer likewise from the consequences of these conditions, from pericardial adhesion and effusion, from hypertrophy and dilatation, and from dropsies. Yet there are some morbid conditions of the heart especially associated with infancy and childhood. It is obvious at once, on considering the matter, that one set of affections of the heart is almost limited to children—I mean congenital malformations. The individuals who are born with such disablement of the vital organ seldom survive to full age.[1] These disorders therefore form a special group, distinct and separate from those which arise in later life. But, apart from these cases of congenital disease, those acquired affections of the valves of the heart and its chambers which are met with at all ages as the result of several different morbid agencies, exhibit in many instances marked variations and special characteristics of their own when they occur in early life. Their pathology and clinical features are modified by their incidence in childhood, or rather we see their pathology in greatest purity and simplicity in early life; it becomes confused and obscured by the complicated influences of riper age; and this is true in many aspects, both as regards the origin of the disease in the first instance, its course and development afterwards, and the relation which it bears to other disorders more or less associated with it. It will be found, I think, that this subject offers more of interest and of novelty than might be expected, especially to those who have studied disease in the wards of a general hospital, where the proportion of children is small, and where experience of heart disease therefore is chiefly derived from the observation of it in grown persons.

At the very outset of my medical career, when working in the out-patient department, I was puzzled by constantly meeting with cases of valvular disease of the heart in children and young persons for which no satisfactory reason could be assigned. There were the congenital cases; there were the cases starting from well-defined attacks of acute rheumatism; there were others which could be traced to scarlatina or to nephritis; but a considerable number remained still unaccounted for. They were clearly not congenital. In the first place, the aortic valves were comparatively seldom affected as compared with the mitral, whereas the valvular malformations of congenital disease affect the aortic valves far more frequently than the mitral. Congenital affections, moreover, are most commonly associated with malformations of the pulmonary artery. Disease of the mitral valve is rare in any form as a congenital condition rarer still as a result of inflammatory changes in utero When it does exist, it usually consists in some irregularity in size or number of the segments; yet, in these cases, when examined post mortem, vegetations and thickenings and distortions were found, exactly similar to those met with as the result of rheumatic endocarditis, or the atheromatous changes of later age. And in aortic disease, in like manner, the changes were inflammatory, not simple malformations; so that no hypothesis of congenital disease would satisfy the conditions. Again, there was no history of rheumatic fever in these cases; while the patients were too young to be the subjects of the degenerative or atheromatous changes which are a common source of valve lesions in later life. There was evidently some other influence at work—a factor, or factors, hitherto undetected. With the view of discovering, if possible, this hidden cause, I collected for several years all cases of valvular and pericardial affection of the heart in children. The results of this investigation, and of a similar one conducted for me more recently by my friend Dr. Chaffey, the registrar of this hospital, I shall lay before you in due course.

Let me first, however, state more exactly how the case stands as to the known causation of the various forms of heart disease in children:—1. There are the congenital cases, a well-marked and distinct group, usually not valvular, nor affecting the pericardium, in the vast majority of cases of the nature of simple malformations, rarely inflammatory. 2. The group of cases, valvular or pericardial, due to inflammatory changes traceable to well-marked attacks of acute rheumatism. 3. A large group of cases, chiefly valvular, some pericardial, associated with chorea, the exact relation between the two in the cases where there is no concurrent acute rheumatism being still undecided. 4. A small number of cases arising in the course of scarlatina, measles, or, more rarely, some other specific exanthem. 5. A small number of cases, chiefly pericardial, some valvular, some of simple hypertrophy and dilatation, arising in the course of Bright's disease, and probably uræmic. 6. A small group occurring as a result of pyæmia or septicæmia. 7. The group of which I spoke of before, comprising a large number of cases of valvular disease, and some of pericarditis, for which no satisfactory cause has been made out, cases apparently not connected with any of the recognised causes, such as congenital malformation, acute rheumatism, chorea, scarlatina, Bright's disease, and septicæmia.

Now of the first group I shall say little, for several good and sufficient reasons. The interest attaching to them is chiefly pathological; their clinical treatment is limited to the mitigation of the consequences of the mechanical defects of original construction—without power to alter this, and without reasonable hope of materially prolonging life or of preventing like faults in the future; because, also, the question has been very exhaustively treated already—viz., by the late Dr. Peacock in his work on the subject,[2] and more recently in the article contributed by him to Quain's Dictionary of Medicine. To this I could add nothing of importance. I will merely remind you, in passing, that such congenital malformations are usually the result of arrested development at varying periods in the fœtal state; much more rarely of inflammation, possibly syphilitic, in utero; that, having their origin, as a rule, in fault of the pulmonary artery or ductus arteriosus, they give rise chiefly to defective aeration of blood and its consequences; and that by these characters, their history, and the fact of their association with the right side of the heart, they are generally readily distinguished from the diseases of valves or chambers which arise after birth. Of the second group of cases associated with well-marked attacks of acute rheumatism I shall also say little. They are well defined and familiar enough; their pathology is known and accepted. With the fourth, fifth, and sixth groups I shall deal incidentally, as occasion may arise in connexion with the other groups still remaining—viz., the second and the last. For it is with the last group (that of unexplained heart disease) and of the second (that of cases associated with chorea) that I shall especially concern myself in these lectures.

A careful and minute investigation of the clinical history of these cases made at the time, and made with this special end in view, led me irresistibly to the conclusion that a

[1] The researches of Dr. Peacock and others show that in cases where the organ presents a very rudimentary condition life can only be prolonged for a few hours or days, as when the septum is entirely wanting, or the heart one of two chambers only, an auricle and ventricle. When the septum exists but is rudimentary, exceptional instances have been recorded where individuals have survived to eleven, sixteen, and twenty-one years. More often they only survive birth a few days. When the septum is more developed, possibility of life becomes stronger (nine cases are recorded of survival to between twenty and thirty years); where the pulmonic orifice or artery is closed, few patients survive more than two years, but survival to nine years and twelve years is recorded. In mere contraction of the pulmonary artery without other defect, two patients lived to forty-four and sixty-three years; with patent foramen ovale in addition, two patients lived to forty and fifty-seven years; where the ductus arteriosus was still patent, two patients lived to thirteen and a half and nineteen years. These ages are of course the extremes.

[2] Malformations of the Heart, second edition.

very large proportion of them are of rheumatic origin. In the majority of cases, the affection of the joints which we regard as distinctive of rheumatic inflammation was so slight as to attract little attention; in many instances, too, the joint affection occurred at a different period of time to that at which the cardiac affection arose or was observed. In others, again, while there was no history of arthritis in the patient, there was proof of strong rheumatic disposition in the family history—i.e., of acute rheumatism in one or both parents, brothers or sisters, or other close blood relations. Moreover, it appeared that a considerable number of the second group of cases—viz., those associated with chorea—occurred in children who had suffered from slight arthritis, or whose near blood relations exhibited the rheumatic diathesis in the form of well-marked acute rheumatism.

It will be asked, perhaps, why these cases of unexplained heart disease, and of heart disease associated with chorea, have not been distinctly identified as of rheumatic origin. There are many good reasons. One, I think, is to be found in the fact that no systematic inquiry into their pathology has hitherto been made on a satisfactory plan. Cases have been collected from various sources, compilations made, and inferences with regard to this special point drawn from them; but the cases have been in great measure imperfectly investigated, and the deductions obtained from them have been illusory and unreliable. In order that clinical histories and observations should afford satisfactory ground for statistics, it is essential that they should be taken *ad rem*—i.e., with especial regard to the point into which inquiry is being made. In cases recorded for other purposes, the vital questions are not put, or are given vaguely; and thus omissions, the absence of record of the existence of any condition, are taken as negatives, or a general negative assumed to cover points which have actually never been inquired into. Now, such statistics are not only useless, but they are more than useless, they are misleading.[3]

In the cases which I use as the basis of the conclusions put forth in these lectures, minute inquiry into the points in question has been made in each instance at the time, and in the majority I have made the investigation myself. Let me illustrate the difference in value of what may be called *pertinent* as compared with *casual* inquiry by an example.

Mary H——, aged eleven, came under my care at this hospital suffering from advanced valvular disease, with all the ordinary signs of extensive mitral regurgitation and resultant hypertrophy and dilatation. She brought with her a hospital card, from which it appeared that three years previously she had been under the care of a distinguished physician, who had made these notes of the child's case: "Congenital (?) morbus cordis; murmur, with first sound at the base, more audible to the left; loud murmur, with first sound at the apex." It seemed to me that this case of ordinary mitral affection had no suggestion of congenital disease about it. It was evident that the previous consultant had looked upon it as a case of valvular mischief of unexplained origin, which he thought might possibly be congenital. I was at the time engaged in examining the causation of these cases of unexplained heart disease, and I proceeded to investigate this. I learnt that eight years previously—i.e., five years before the first time the child was seen by the physician—she had an attack which was clearly one of acute rheumatism; her knees, ankles, and wrists were swollen and tender, so that she had been unable to leave her bed for three weeks. It was after this attack that she first complained of palpitation. Since then she had had several similar attacks of arthritis. The valvular mischief was not congenital; it was due, no doubt, to rheumatic endocarditis. The history of acute rheumatism was clear enough and certain enough. It was not brought out before for lack of minute definite inquiry on the point. The arthritis was not recognised at the time as rheumatic, but regarded as an incident of some casual feverish attack. Until specific questions as to affection of the joints were put, the occurrence of rheumatic arthritis was not disclosed. In a statistical summary this case would have been classed as non-rheumatic.

Another reason why the connexion of these cases of heart disease with the rheumatic state has not been recognised lies in the imperfect appreciation of the fact that the rheumatic predisposition is strongly inherited; and yet I am convinced, and shall, I think, prove to your satisfaction shortly, that the tendency to rheumatism is as marked a family predisposition and as strongly inherited as the tendency to gout. Let me give one or two examples of this constitutional predisposition in families.

Alice R——, aged fifteen, admitted to St. Mary's in May, 1880, with loud mitral regurgitant murmur. She had had rheumatic fever four times. She had inherited it from her parents on both sides. Her father had had rheumatic fever. Her mother had also had rheumatic fever.

Again: Frances H——, aged seventeen, was admitted to St. Mary's Hospital in May, 1880, with chorea. She had had three previous attacks. One month before the present attack she had acute rheumatism for the first time. There was no evidence of heart disease. The history of family predisposition was strong. Her mother had had rheumatic fever; one of her brothers had had rheumatic fever in St. Mary's, and mitral disease of the heart was noted; after that he had chorea. Another brother had chorea, but no rheumatic affection of the joints.

A third example may be given of the rheumatic state running (if the chorea be allowed to be one phase of it) through three successive generations.

Jessie P——, aged eleven, admitted with the third attack of chorea. She had never any acute rheumatism. There was no sign of heart affection; but her mother had rheumatic fever three years ago, and her father had rheumatic fever, and died of resulting heart disease at thirty. The maternal grandfather and grandmother both had rheumatic fever.

Another reason, again, lies in the fact to which I previously alluded—viz., that the manifestations of rheumatic activity which stamp these cases as rheumatic are frequently slight and escape casual observation altogether, or if they are observed are considered of no moment, or their true nature is overlooked. To my knowledge this constantly happens, and I could give abundant instances in illustration of it. The heart phase or the chorea phase is prominent, the joint affection or other symptom of rheumatic connexion subdued and unobtrusive.

Lastly, there is the other fact I mentioned, perhaps the most potent reason of all—viz., that the cardiac affection often arises, or first attracts observation, at a different period of time to the joint affection or other manifestation of the rheumatic state, not unfrequently before it, and hence fails to be recognised as connected with it. These points will be fully shown in the clinical cases I shall presently bring before you. In order to see clearly and appreciate the evidence which connects these cases of heart disease with the rheumatic taint, it is necessary to trace the various links which bind together the affection of the joints—the arthritis—which we regard as distinctive of acute rheumatism, with other manifestations of the rheumatic state, with valvular disease of the heart, with chorea, with subcutaneous tendinous nodules, with tonsillitis, with erythema, and perhaps with scarlatina. For the affection of the joints, as M. Roger maintained long ago, is but one expression of the rheumatic diathesis. We are so accustomed to regard joint affection as the one essential sign of rheumatism that it is difficult to appreciate this, yet the endocarditis and pericarditis, the chorea, the nodules, the tonsillitis, and the erythema are, some possibly always, others most commonly, equally products of the same constitutional states. And note that this series of phases may be partial, or more or less complete; any one of them may occur alone, or with one or more of the others in varying combinations, either nearly together in point of time or with intervals of varying length between, in any order of sequence. I could quote from my note-book any number of examples of the varying combinations of these different manifestations of the rheumatic constitution, but I have space only for a few. Amongst the most instructive are the cases in which acute carditis occurs in an individual who has previously had rheumatic fever, but without any affection of the joints at the period of cardiac inflammation; for example, a girl of twelve, whom I have just discharged from the hospital. She was admitted with severe chorea, having previously suffered from rheumatic fever three years ago, and had well-marked mitral regur-

[3] I am afraid that the want of specific and definite questions on points of clinical history will in a great degree vitiate the inquiry into acute rheumatism now being conducted by the Collective Investigation Committee. For example, there are no queries as to family inheritance, or as to the previous occurrence of chorea either in the patient or family, or of valvular disease of the heart in the family. The second is, moreover, essential to the completion of the separate inquiry into chorea, for it is obvious that otherwise rheumatic symptoms occurring at a later period than the chorea—i.e., after the inquiry has been completed—will not appear. This can only be rectified by an inquiry as to previous chorea being introduced into the inquiry into acute rheumatism.

gitant disease. The chorea got nearly well in three weeks under arsenic. Just at this point acute pericarditis set in. There was no accompanying affection of the joints. I take it that both chorea and pericarditis were of rheumatic origin.

Another case shows a similar development of carditis without joint affection in a patient who had previously had acute rheumatism.

Emily R——, aged eleven, came as an out-patient to St. Mary's Hospital on November 13th, 1877, complaining of palpitation and feverishness. The heart was acting tumultuously (120 to the minute), but there was no trace of murmur, no sign of hypertrophy or dilatation. The temperature was 103°. She was admitted as an in-patient into the hospital in Great Ormond-street. In four days a diastolic bruit developed over the aortic orifice, becoming extremely loud and rough. Her father had had rheumatic fever, and this fact, coupled with that of her own previous attack, led me to regard the endocarditis as rheumatic. I watched keenly for any sign of joint affection. Fourteen days later she complained of pain in both ankles, and one was found to be swollen and tender. A year afterwards this child was again admitted with a well-marked attack of subacute joint rheumatism.

Another notable combination is where the heart affection occurs without any joint inflammation at any period whatever, but with other evidence of rheumatic disposition.

Henry C——, aged ten and a half, was admitted into Great Ormond-street in June, 1878, with mitral stenosis and regurgitation, and great hypertrophy. He had never suffered rheumatism of the joints, but he had chorea three years ago, and his mother has had rheumatic fever, and is suffering from valvular disease of the heart resulting from it. The heart disease in the case of the child may most reasonably be attributed to rheumatic endocarditis; the chorea to rheumatic taint likewise. This was an example of chorea which, if observed at the time of occurrence, would certainly have been put down as non-rheumatic, and the heart affection been probably noted as choreic, the family history of rheumatic fever in the mother being overlooked or ignored.

Another combination, again, is where chorea occurs first with valvular inflammation of the heart, the affection of the joints appearing later in the rheumatic series, and apart from the other manifestations of the diathesis.

Alice W——, aged sixteen, came as out-patient to St. Mary's complaining of pain, stiffness, tenderness and swelling of knees, wrists, and ankles. On examining the chest, well-marked signs of old-standing mitral disease were found—viz., a loud, rough, systolic bruit at the apex, heaving impulse, extensive pericardial dulness, and pulsation, showing considerable dilatation and hypertrophy. She had never had any articular affection before, but four years ago she had chorea. So the sequence was—(1) chorea, (2) morbus cordis, (3) arthritis; or (1) morbus cordis, (2) chorea, (3) arthritis. The mother had had rheumatic fever. The mother's sister had likewise had rheumatic fever. In this case, again, the chorea would probably have been recorded as non-rheumatic and the valvular affection of the heart as "choreic," for the articular affection was not developed until four years later, and the strong rheumatic family history would not be noted or regarded.

Another combination worthy of observation is that where the heart affection comes first in the series, followed after an interval by articular affection, and later still by chorea.

Katherine D——, aged eight, was admitted on April 24th, 1870, to St. Mary's, for palpitation, shortness of breath, and pain in the left side. She had long suffered from palpitation, and from dyspnœa for the last twelve months. On examining the chest there was found a loud mitral systolic murmur, and other signs of heart disease of some standing. She had never had any articular affection, however, until five weeks ago, when her joints became tender and painful, and she was so stiff that she could not get out of bed for four days. She had never had chorea, nor was there any family history of this or of acute rheumatism. Fourteen days later there came jactitation of the left hand and loss of power in it, with choreic movements in the fingers and grimacing. This developed in the course of a few days into well-marked chorea. Here, again, was a case in which the rheumatic affection might easily have been overlooked, as the endocarditis undoubtedly was at the time of its occurrence, and the case recorded simply as affection of the heart associated with chorea. If the heart affection had been discovered at first, there would have been absolutely nothing to identify it as rheumatic.

Yet another combination is that of valvular disease of the heart with chorea, without any articular affection in the patient, and without any family history of acute rheumatism in any form. Such cases, however, are far more rare than is supposed. I have met with seven only out of forty-four I have recently examined, and the following is one of them.

Sarah B——, aged nine, admitted with a third attack of chorea. No cause could be assigned. Physical examination disclosed a loud mitral murmur. She never had any arthritic symptoms. No chorea or rheumatism is known in the family. Here there is no direct evidence of rheumatic taint; but, viewed in the light of the constant association of chorea and exactly such heart affection in combination with rheumatic predisposition as in the case of Alice W——, the most plausible solution is that they were here due to some rheumatic influence which could not be traced by other signs. Possibly arthritis might be developed later, after she passed from observation, as one of the last of the rheumatic series.

Another not unfrequent combination is where the three phases present are morbus cordis, arthritis, and subcutaneous tendinous nodules, chorea being absent from the series. A most interesting example of this came under my notice a few days ago.

Dr. Barlow and Dr. Warner have pointed out the significance of these subcutaneous tendinous swellings occurring in rheumatism; and Dr. Barlow states that he has good reason to believe that some cardiac lesion existed in every one of the twenty-seven cases he had investigated. Dr. Angel Money, who has further examined this question, affirms that nodules are found in half the cases of rheumatism in which well-marked heart disease occurs. The case which I have just met with affords an excellent illustration of this connexion:

Harold G——, a boy, aged fourteen and a half, was brought to me on April 25th last, on account of hard swellings on the palms of the hands, which his parents attributed to gout. These had caused so much stiffness that the boy could hardly use his fingers. The boy was at one of the large public schools, and amongst his favourite pursuits were athletic sports, cricket, rifle-shooting, and playing the violoncello. From all these he found himself barred by the crippled state of his hands—by "the gout." The mother told me, however, that in addition to this he was not well. He had failed a good deal during the last year; could not run races, which exhausted him much; and for the same reason he had given up football. She felt sure the boy was not fanciful. He had been an ardent competitor in all these sports; his taste remained, but the power to do well had gone. On examination, I found over the flexor tendons of the middle and ring fingers of both hands nodules of the size of almonds—elongated, firm, not very tender; similar nodules, but smaller, size of peas and hempseed, on both wrists (flexor aspect) and both elbows; one on the chest near the fourth left rib; none on the knees or ankles. Seeing the nodules, I at once asked about acute rheumatism. The boy had never had anything like rheumatic fever, nor scarlatina, nor chorea; but on cross-examination I found that sixteen months ago he had pain, swelling, tenderness, and stiffness of the wrists and knees for about a fortnight. The doctor in attendance diagnosed rheumatism. I found on further inquiry that another child—this boy's sister—had had chorea followed by scarlatina, but that the brother escaped, and that the paternal grandmother had had rheumatic fever. On stripping the boy's chest to examine it, the heart's pulsation could be seen over a large area—viz., in the fourth, fifth, and sixth spaces between the nipple line and the sternum. The area of cardiac dulness was likewise greatly increased, extending from the nipple line in the fourth space across to the sternum. Applying the stethoscope, I heard a loud rough murmur over the root of the aorta in place of the second sound. The pulse was "water hammer," the carotids visibly filling and emptying at each stroke of the heart. The boy had extensive incompetence of the aortic valves—aortic regurgitation, with dilatation and hypertrophy of the left ventricle. Here was the secret of his failing aptitude for athletic exercises. The mischief had no doubt commenced during the slight rheumatic attack, sixteen months before, and had been aggravated by violent physical exertion.

I wish to call attention to the fact that in some instances the rheumatic pain and tenderness appear to be seated in the tendons and sheaths of muscles rather than in the joint structures themselves. It may be questioned, perhaps, whether these are really manifestations of the rheumatic

state, and I have not accepted them as such for statistical purposes; but I have lately, within the last few weeks, met with a case of heart affection in which there was similar pain and tenderness, and there is a strong presumption that the local pain and the heart affection were rheumatic.

Ernest C——, a boy aged eleven years, was admitted into the hospital for intermittent hæmaturia. On examining his chest, well-marked mitral disease was discovered, regurgitation, and probably stenosis, evidenced by valve murmurs, thrill, diffused impulse, and signs of hypertrophy. On inquiry it was found that he had never had any arthritic symptoms, nothing which could be regarded as rheumatic affection of the joints; never chorea; but he has had scarlatina. There is no family history of acute rheumatism. Three weeks later he complained of pain in one knee, which he could not bear to extend fully. On examination, the upper part of the calf muscle and the tendons at the lower border of the popliteal space were found rigid, tender, and swollen; no other joints were affected. Was this rheumatic? It is probable; and that the mitral affection also had its origin in a rheumatic endocarditis. This hypothesis has been strengthened by two other cases which, oddly enough, have come under my care at this juncture during the past week.

The first, a little girl four years old, was brought to me on account of what was supposed to be incipient talipes varus of the right leg, for which the child had been galvanised. As in the preceding case, there had been some difficulty in putting down the heel for a few days only, but this had disappeared. I could find no distortion whatever, but both knees were unmistakably swollen and tender (painful in movement), especially the left, the side on which there had been no suspicion of talipes. The heart-sounds were normal. There was no rise of temperature, and no history of chorea, but the mother had had rheumatic fever, and I learnt that this child had suffered from pains in the knees and ankles from time to time during the last six months. Here was a case of joint affection almost certainly rheumatic, which had been regarded as a tonic muscular spasm. The rheumatic indications were so slight that they escaped notice.

The other case was that of a boy five years old, who was brought to me because he had suddenly been unable to walk when he got out of bed in the morning; when made to do so, he went with bent knees and on the tips of his toes. An attempt to straighten the knees gave pain about the calf muscles and ham tendons. There was no swelling. The temperature was 103°. In the course of twelve hours the stiffness had declined, so that he could walk again. The temperature had fallen to 100°. The heart's action was somewhat excited, but there was no bruit. He had never had chorea nor previous arthritis, but suffered from tonsillitis. The family history disclosed the fact that his mother had had rheumatic fever, with pericarditis. Auscultation revealed a loud mitral regurgitant murmur. Moreover, the boy's cousin by the father's side had acute rheumatism, recurrent tonsillitis, purpura rheumatica, and chorea. I believe this child's stiff knees and fever were of rheumatic origin too.

The connexion between scarlatina and rheumatism is generally allowed; and as a rule, when endocarditis or pericarditis occur in scarlatina, rheumatic affection of the joints is also at the time, before or after, developed. Yet there are instances in which carditis supervenes on scarlatina without any concomitant joint affection. The following case is an example.

Sarah H——, eight and a half years old, was admitted to this hospital with a loud systolic apex murmur. She had also some jactitation of the right side, and loss of power there. She had never had rheumatism or any arthritis, but two years previously had scarlatina, followed by dropsy.[4]

Of the direct association of tonsillitis with endocarditis or pericarditis I have met with no clear instance; but of the rheumatic connexion of tonsillitis and of the association of most of the rheumatic phases I have an excellent illustration in my own family. Five years ago one of my boys, then eight years old, had well-marked acute rheumatism. There was happily no carditis. Since then he has had repeated attacks of acute tonsillitis, and suffers habitually from the chronic form. A year later he had a slight return of the joint symptoms, and at the same time purpura rheumatica or erythema rheumatica. A few months later still he developed chorea. Nor can I quote any case in which cardiac disease has been directly associated with the erythematous eruptions which are recognised as of rheumatic nature, although several instances of purpura rheumatica with joint affection have come under my notice. Two instances in which there has been an association of urticaria—which is one of the erythematous group—with the rheumatic diathesis have come under my notice while preparing this lecture.

In one case, J. G——, a girl, aged eleven, was brought to me for recurrent and frequently repeated attacks of urticaria for the last four months. There was no persistent erythema, but severe ephemeral urticaria with extreme itching. In this family the rheumatic history is extremely strong. Two of the brothers have had rheumatic fever. Another had chorea without arthritic symptoms. The mother's half-brother has had rheumatic fever. One of the boys has had rheumatic fever twice, and a subacute attack since. He has serious valvular disease of the heart. I cannot venture to affirm that in this case the urticaria is due to the rheumatism as an exciting cause; but the family predisposition is so strong that it affords evidence in favour of the view that the rheumatic constitution includes a susceptibility to urticaria, as to other erythematous eruptions.

The second case is that of a lady of sixty, Mrs. C——, who has had rheumatic fever, and is now suffering from severe recurrent urticaria.

These two cases of course give no certainty of connexion between the eruption and the rheumatic state; but they have impressed my mind by coming under my notice simultaneously, and I mention them as possible additional links in the rheumatic series, of which carditis is the most grave and important.

Gentlemen, I have endeavoured to put before you, and illustrate by appropriate examples, the intimate pathological connexion which exists in a large class of cases between valvular disease of the heart and pericarditis in children and young persons and the other phases of the rheumatic diathesis, a connexion which in these cases has hitherto been imperfectly traced and acknowledged. I shall in my next lecture show how far the view thus suggested by these frequent instances is supported by the hard logic of statistical facts; discuss briefly the other causes of organic disease, which occur more rarely, and which, with those I have already treated, make up the chief sum of organic cardiac affections; and, finally, I shall, I hope, deduce some practical clinical lessons which may be of service in the observation and treatment of these conditions in the active work of our profession.

[4] This factor of scarlatina requires fuller examination. It is possible that it may be more frequently responsible for carditis than supposed.

An Address
ON THE
TREATMENT OF WOUNDS.[1]

Delivered at the Birmingham Medical Institute,

BY SAMPSON GAMGEE, F.R.S.E.,
PRESIDENT OF THE INSTITUTE.

MR. PRESIDENT AND GENTLEMEN,—Several sessions have elapsed since I have troubled this Society with any remarks on the subject of wound treatment, on which for a good many years previously I had sought, and been very kindly granted, the privilege of addressing it. I beg you to believe that my recent silence has not been the outcome of idleness or indifference, but of the conviction which grows of experience. True as it is that the free development of differences is the soundest basis of unity, it is also true that, in the solution of all debatable questions, time is a factor, with which no amount of ability and cogency in exposing fallacies can possibly dispense. The many-sidedness of truth often requires a very great deal of turning over before it can be seen all round. The web of error is so intricate that it cannot be unravelled all at once. The day is not very

[1] In revising this address for publication, the author has incorporated the substance of his reply to the discussion, which followed delivery, on the 8th inst., before the Birmingham and Midland Counties Branch of the British Medical Association

remote when I was one of a comparatively small number who protested against what we believed to be the exaggerations and fancies of a so-styled new surgery. But our numbers have very steadily increased. The time is perhaps not yet when the scientific principles of wound treatment admit of exposition so as to obtain universal assent, but we are nearing that goal; and, by your permission, I shall endeavour to state, in terms which may least divide us, the leading principles of wound treatment on which the majority of surgeons are agreed.

Rest, the first and great requisite for the restoration of injured parts, is perfect in proportion as coaptation of a wound is immovably maintained. Of that proposition infrequent dressing is a corollary. While a patient is free from pain, the pulse and respiration ratio normal, and the thermometer within 100° F., the less dressings are disturbed the better. When to change them, must be determined by the exigencies of particular cases; but, as a general principle, it may be taken as established that infrequent dressing should be the rule.

Clinical observation and histological research concur in proving that repair is an extension and adaptation of the physiological process of nutrition, against which nothing militates more powerfully than does any cause producing vascular excitement or stasis. A balance of the physical and vital forces and conditions of the circulation, sanguineous and lymphatic, absence of nerve irritation and retention, are of the very essence of normal nutrition; and those conditions are very powerfully and beneficially influenced by position and pressure.

I have just now under treatment a finely built man, of inventive genius and great mechanical ability, who has been nearly ruined by five years' trouble with a sore on the left leg. It was caused by a blow, has been treated in a great variety of ways, but has never healed. When I first saw the patient, just over a fortnight ago, the leg was red, tense, shiny, and tender; the sore, situated about the middle of the front of the left leg, measured nearly 2 inches in length by 1½ inch in width. Its surface was glazed and greyish, the skin edge white and hard. Having measured the leg accurately while the patient stood erect, I found the circumference of the calf to be 16½ in.; it fell to 15⅝ in. one minute after the patient had been on his back on the floor, while my son held the leg vertically by the heel. In this position I strapped the leg with elemi plaster, leaving intervals for drainage, and, over a uniform layer of absorbent tissue, bandaged the leg by rapid compressing spirals with eighteen yards of absorbent bandage. The foot was then let down and the patient allowed to get up. He walked away in perfect ease. I renew the dressing every fourth day, occasionally touching the centre of the rapidly decreasing sore with solid sulphate of copper, and it is quite evident his recovery will be complete in less weeks than the trouble has lasted years.

The case is a very homely illustration of elementary surgical principles, carefully carried out. Amongst the therapeutic influences which have given that man comfort and healing, the two principal ones are position and pressure. The practice of surgery is full of confirmatory evidence.

Our observations thus far claim assent to immobility and infrequent dressing, position and pressure, as factors in wound treatment conforming to sound physiological doctrine, and confirmed by clinical experience. A like scientific claim is advanced, analogous demonstrative evidence is adducible, in favour of drainage and dry dressing.

The surgeon, like the agriculturist, knows that while some moisture is essential to nutrition and growth, its excess leads to decomposition and waste. Drainage was the intention of the old surgical practice of counter-openings, tents, and setons; and John Hennen went so far as to draw a woollen thread through an accumulation of pus, "to perform the part of a syphon." But it was not until 1855 that Chassaignac, in establishing drainage as a general principle and practice of surgical therapeutics, won for himself a foremost place amongst the improvers of our art. He was not only influenced by the idea, but followed the method, of agricultural drainage, substituting for tiled drain-pipes perforated indiarubber tubes, which, after trial of metal and bone tubes, are still admitted to be the drain-pipes most generally applicable to surgical practice.

The essential facts in Chassaignac's system of drainage are that indiarubber tubes may be made to traverse, and dwell in, the muscular, or bony structures of the limbs, the large joints, or the great visceral cavities, without producing irritation; and that, as they fill with discharge by capillary attraction, they do not give admission to air from without. Acting on these lines, the French surgeon and his earlier followers employed drainage in evacuating purulent collections; but the method has been gradually and most beneficially extended to the prevention of suppuration by carrying off serous effusions. These, if retained, are liable to decomposition, and by mechanical tension and nerve irritation are potent causes of inflammation, which is opposed to healthy nutrition and repair, and is the prime factor in the chain of pathological events leading to blood-poisoning and death.

But though tubes be the most generally applicable instruments for drainage in wound treatment, it is important to bear in mind that they are not essential to it. The parallel between agricultural and surgical drainage holds good in the utilisation of natural resources, physical and physiological, in promoting the stagnation of liquids, and carrying them off when they have accumulated. It is in obedience to well-established hydraulic law, that position dams and drains both the body and the land.

To facilitate drainage by gravitation should always be the aim of the operating surgeon in planning the direction and extent of wounds, and in placing the patient after operation. Thus, in amputation of the breast, a free incision parallel with the transverse axis of the body is most conducive to healing by the first intention, in favouring natural drainage outwards and downwards, all the more so if the patient's bed be so made as to incline the body slightly towards the side operated on. One great advantage in Teale's method of amputation results from the facilities for natural drainage offered by the position and shape of the rectangular flaps. When extravasation of urine attends stricture, a free dependent incision in the middle line of the perineum arrests mischief locally and constitutionally, in direct proportion as it favours easy drainage. On the same principle is based the golden rule, that, when it is determined to open an abscess, the most dependent position should be chosen.

As position assists natural drainage, so does pressure; and, by a little ingenuity, pads may be adjusted to act as banks in directing extravasated fluids outwards along natural trenches. Thus permeation into healthy tissues, decomposition, and irritation are prevented. But however dexterously and economically natural resources be utilised, drainage is often impracticable without the employment of tubes.

Drainage-tubes, like most other good things, are liable to abuse. They should be neither too few nor too small for efficiency; and they should not be so numerous, thick, and long, as to act like foreign bodies and prevent the contact of surfaces of which the coalescence is desired. For the same reason drainage-tubes should be removed when they cease to be absolutely necessary. In case of doubt, a wire or thread may be left in the track of a removed drainage-tube, and used in drawing through another if it become necessary. Meanwhile, the wound can be allowed to consolidate under pressure and absorbent dressings, which, always the complement, frequently dispense with the necessity, of drainage-tubes.

It is not merely the wound itself that is benefited by preventing the accumulation of discharges, but the nutrition of the whole limb is benefited, stasis prevented, and pathological change, once initiated, often arrested, by merely raising and swinging a limb, which can thereby be drained of a great part of its fluid, almost as rapidly and effectually as if it were a piece of physical mechanism.

The physico-chemical line of reasoning, on which the practice of drainage rests, is the explanation and justification of dry dressing. Clinical evidence is equally confirmatory. Cold water irrigation is consistent with rapid and sound wound healing, in virtue of its repressive and sedative action on the local circulation and innervation, and of the perfect drainage which it secures; but stagnant water, with warmth, favours putrefaction, and is opposed to primary wound healing.

While, as a rule, dry wound dressings are to be preferred, it may sometimes be desirable to moisten them to prevent too great adhesiveness, or to add a lotion for antiseptic, astringent, or sedative action. In the widely varying conditions of life, healthy and diseased, principles must in practice be subordinated to special exigencies; but, as a rule, the dryer wounds are kept, the more quickly do they heal, and proportionately less is the amount of suppuration.

So far antiseptics have only been mentioned once, and that incidentally—a fact which may not have produced a favourable impression on any one of my hearers who may be a believer in the germ theory as the basis and essence of a new surgery.

To quote from my address at the International Medical Congress of 1881, "The question is not one of antiseptics or no antiseptics, but of the form and proportion in which they shall be employed in particular conditions. The great antiseptic is life. Rely on the preservative power of living tissues; be physiologists always while you are surgeons, and you will have fewer and fewer opportunities of studying pathological states after surgical injuries and wounds."

In so far as rest, position, and pressure prevent irritation, they are opposed to vascular excitement and attendant effusion, which is the material for decomposition. Thus they are in effect antiseptic. All such dressing substances as tincture of benzoin, styptic colloid, and collodion, used as adjuncts to dry dressing, are in an eminent degree antiputrescent; and such, too, is the action of drainage and of all absorbent dressings, in direct proportion to their power in taking up secretions, and leaving the neighbourhood of a wound clean and dry. The antiseptic power of dryness is proverbial. The housekeeper knows that to preserve meat for domestic purposes it must be kept cool and dry; the freer the current so much the better; any moisture which exudes on the surface from time to time must be wiped off; and sprinkling with flour or other absorbent material keeps the meat sweet. Moistening and putrefaction, drying and preservation, go together. It is along damp courses and alluvial plains that contagia spread, not on sandy hills; so with wounds—the dry ones heal, the wet ones rot.

I met the other day a surgical friend attached to a not very distant hospital, who told me that he had recently had a series of splendid cases of wound healing under what he was pleased to call my treatment; "but in my hospital," he added, "I still use the spray." I asked him why. "Oh," rejoined my friend, "it is a complicated system, and, giving the nurses and dressers plenty to do, keeps them to their work."

Just as the study of comparative physiology is admitted to illustrate the laws of life in man, so it is reasonable to believe that the problem of wound repair may be elucidated by comparative observations in animals.

"Once inflammatory mischief is set up in a human joint, suppuration is very frequent; in animals very rare. Compare a man's ankle with its analogous joint in the horse, the hock, which is a very common seat of extra- and inter-articular disease. How common, though the need of rest be well understood and practised, is suppuration of the ankle! How rare is it in the hock! though the cause of lameness is so frequent in this joint, and it is so difficult to rest it. The difference has a great bearing on the etiology of suppuration, and on the question of wound treatment, and is due to a variety of causes. Beasts are always temperate; and, in comparison with many men, virtuous. Their procreation is largely governed by interested intelligence, and hence they are comparatively free from the blighting and rotting operation of hereditary disease. Then, again, animals live mostly in the open air, under conditions which are, on the whole, more favourable to a high standard of physical health than are those enjoyed by a large proportion of the population. Whereas even small wounds in man are attended with serious, and sometimes fatal, results, recovery is almost the invariable rule, even after large wounds, in animals. To one cause of traumatic death, these are more subject than man; and that is tetanus; owing probably to the exceptional operation of their ordinary cause of safety, exposure to the open air."[2]

If healing can be so safely relied upon in the open air, what becomes of the doctrine which, assuming the maleficent potency of ubiquitous atmospheric germs, gives elaborate directions for their destruction, and is styled "a new surgery." The traditional use in veterinary practice of preparations of tar and turpentine, of sulphate of copper and corrosive sublimate, and of the tinctures of aloes, benzoin, and myrrh, as antiputrescents, may be cited as an illustration of old custom sanctioned by scientific progress. There can be no doubt that in making of surgical dressing a ceremonial, with a faith, and a name, and a ritual, much was done to ensure attention to truths which in their naked simplicity might long have passed unnoticed. This is particularly illustrated among the nations of continental Europe, where surgery did not rest on the scientific foundation imperishably laid by the immediate predecessors of William and John Hunter, and their essentially British school. Having seen little of continental hospitals for thirty years, I last year visited those of Paris and Brussels, and, on my way back from the Copenhagen Congress, spent some most instructive hours in the cliniques of Berlin, Hallé, and Vienna. The carbolic spray, a short time previously so popular, had nearly everywhere been given up; but throughout the whole journey I did not see a wound poulticed. Cleanliness was everywhere, pyæmia nowhere; the very converse of my student days over the same ground. In Italy a like state of things exists, as anyone may satisfy himself who follows closely, in the numerous medical serials of the peninsula, the excellent work now being done in its cliniques.

Lister's and Pasteur's names are everywhere, as exponents of the new doctrine of germs; but still more usefully as preachers of the old gospel of cleanliness. Faith in a new religion has once more proved the needful stimulus to the performance of a plain duty, which the simple study of nature's laws failed to enforce. Yet it remains true that life is the great antiseptic, and that the fear of myriads of vibrionic plague-carriers need not preoccupy those who believe that physiology is the surest basis of the science, and the truest guide to the practice, of wound treatment. Cumulating experience proves that the more closely the repair of injuries is conducted on the physico-vital principles which govern the nutrition of the healthy body, proportionately less will be the evolution of 'local and constitutional pathological conditions.

[2] An address delivered by the author at the third congress of the National Veterinary Association, held at Birmingham, August 4th and 5th, 1885.

ON

CYCLIC ALBUMINURIA (ALBUMINURIA IN THE APPARENTLY HEALTHY).[1]

BY F. W. PAVY, M.D., F.R.S.

ATTENTION has been recently given to a form of albuminuria which has been spoken of as "albuminuria in the apparently healthy," "physiological albuminuria," "intermittent albuminuria," and by my colleague Dr. Moxon, in the Guy's Hospital Reports, vol. xviii., third series, "albuminuria in adolescents." It is important that the albuminuria in question should be distinguished from the ordinary form of albuminuria, as the gravity of the two is diametrically opposed. Several cases have during the last six years fallen under my notice, and I have observed in them a character which has served as a ground of distinction, and enabled me to express an opinion at the commencement which has been verified by the advance of time. The character I refer to is the diurnal alteration that takes place in the condition of the urine. Examined at one period of the twenty-four hours, the urine is found to contain, it may be, a large amount of albumen, whilst at other periods there is none, and what is observed one day is repeated with more or less closeness the next. These cases thus have a cyclic character belonging to them, and hence my adoption of the term "Cyclic Albuminuria" as the heading of this communication. It appears to me an appropriate one to employ for the purpose of classification. The description to be given of what is noticeable is as follows:—In the early morning the urine is free from albumen. Albumen then shows itself; it may be at 9, 10, or 11 A.M., or not till the early part of the afternoon. After reaching its maximum it declines, and often by the evening it has disappeared. It is rare to find that it has not disappeared by bedtime. The period of diurnal appearance is, without too closely limiting it, pretty uniform for each case. Some days the amount may be observed to fall and then rise again. Also there may be considerable variation in the amount of albumen observed on different days. The condition noticed may go on not only for weeks and months, but even for years. It is not accompanied by any impairment of health, and there are none of the ordinary

[1] Read in the Section of Medicine at the annual meeting of the British Medical Association at Cardiff.

constitutional indications of the existence of Bright's disease present. In some cases I have noticed that there has been a sharp and unduly forcible cardiac impulse; but the pulse has been soft, and not hard and sustained as in Bright's disease. Such being the history belonging to the albuminuria in question, there is nothing to lead in a direct manner to its recognition, and it is generally in an incidental way that it becomes brought into view. The urine in other respects represents ordinary characters. No casts of tubules are to be observed, but frequently oxalate of lime crystals are present. The age in the cases that have fallen under my notice has varied from nine to forty-nine. Altogether I have seen three cases in children, respectively aged nine, eleven, and thirteen. Two were boys, the other a girl. It is not surprising that the condition should excite grave looks and the shrugging of shoulders on the part of members of the profession, which give alarm to the patient; but there is nothing to show from the experience that has yet been gained that it is to be regarded as an early stage of Bright's disease, or that it leads to anything serious. The kind of albumen present in several of the cases has not been simply ser-albumen, but a mixture of caseiform or alkali-albumen with ser-albumen. I do not propose at the present moment to offer any theory in explanation of these cases. Analogous phenomena are, however, noticeable in the case of persons subject to the phosphatic diathesis. Here the urine may be perfectly bright and clear in the early morning, whilst for a few hours after breakfast it is turbid from the deposition of phosphates, and becomes clear again in the afternoon, and remains so till the following day after breakfast, when the same cyclic course of events is repeated. Again, without our being able to account for it by the operation of external influence, a diurnal variation occurs in a regular manner of the temperature of the body. An illustration is here afforded of a physiological cyclic change, and other illustrations showing the tendency in this direction might be adduced.

I will now supply the details of a few cases selected from those which have fallen under my notice.

In the spring of 1881 Mr. O. T——, a tall, well-built, well-nourished, healthy-looking young man, twenty-one years of age, discovered the existence of albumen in his urine. He was engaged in practical chemical work, and was led to examine his own urine when suffering from a temporary attack of lumbar pain. To his dismay he found albumen present, and for some time was in a state of mental distress about it. When the case fell under my observation I desired that specimens of urine passed at different periods of the twenty-four hours should be brought to me for examination, and recognised the case to be one of the class I am describing. Frequent examinations of the urine were made, and at one time this was done for three weeks on every consecutive day. What was observed was this: The urine passed on rising in the morning was never found to contain albumen. Sometimes as early as 10 and 11 A.M., but at other times not till about 2 P.M., albumen began to be perceptible. On first being found, the quantity was slight, but went on increasing till usually about 6 P.M., when the maximum point was reached. It afterwards declined, and usually on going to bed the urine was free from albumen, or, if it contained any, it was only a trace. Breakfast was taken at 8 A.M., lunch at 2 P.M., and dinner at 6 P.M. Beyond the presence of albumen, the urine presented normal characters, except that it threw down oxalate of lime crystals. Casts of tubules were never found. There was no constitutional evidence of Bright's disease. The pulse was soft. There was undue cardiac impulse, but it was sharp, and not heaving. Such was the condition existing in 1881, and, being desirous of knowing whether it had disappeared or not, I wrote in March of the present year requesting that I might be afforded the opportunity of again examining the urine. I received in reply as follows: "In answer to your request of yesterday, I shall be very pleased to do anything I can to be of service to you. For a short time I tested my urine frequently, with the same results. I then gave it up, as I found it only led to my getting mentally uneasy, so that for the last three years I have never tested for albumen. I will try to come and see you, as you request. We are so busy just at present that I am afraid I cannot well get away during business hours; however, I will try one day next week, and in the meantime will make a few more tests of the urine passed at various periods, and let you know the results when I see you." In the following week I received a visit from Mr. O. T——. He brought with him specimens of urine, and told me he had found that the old condition still existed in the same form as before, the urine being free from albumen in the morning till about noon, the maximum amount being present between 4 and 6 P.M., and the urine being free again about bedtime, or, if not absolutely free, only containing a trace. I examined the specimens brought, and the results obtained confirmed this statement, but the afternoon urine contained less albumen than I had noticed previously. This might have been incidental. The bodily health was good in every way. There had been no illness during the four years that had elapsed, and no deviation from the state before observed was perceptible. I have again procured specimens just previous to the Association meeting, so as to bring the report of the case up to the present time. The urine passed at 8 A.M. on July 20th was free from albumen, that passed at noon contained a trace, that passed at 5 P.M. a considerable amount, and that on going to bed a trace. The same kind of condition that was before noted, therefore, still exists.

In July, 1883, Mr. T. W. R——, eighteen years of age, was brought to me by his father, with the history that he had recently successfully gone through the examination for a Civil Service appointment in one of the British possessions, and on afterwards presenting himself for medical examination was not passed on account of the presence of albumen in his urine. He had been at Cheltenham College and had been reckoned as one of the healthiest there, engaging freely in the different sports pursued by the students without the thought having occurred to himself or others that anything wrong existed with him. The urine passed at the time of consultation, about the middle of the morning, contained a slight amount of albumen. I desired that specimens passed at different periods should be sent for examination, and it was found that the early morning urine was free from albumen, whilst albumen was present in notable amount at 1 P.M., and absent again at bedtime. Examinations were made on July 19th and 30th, and Aug. 4th, 8th, and 14th. They all agreed in showing the early morning urine to be free from albumen; the amount varied in the early afternoon urine, and by the end of the evening the urine had become free from albumen, or only contained just a perceptible trace. Microscopic examinations revealed the presence of oxalate of lime crystals, and no casts. The result of this examination was communicated to the authorities in Whitehall, and I was asked to meet the medical advisers (two of the most distinguished members of the profession) of the Board at a time appointed for the candidate to attend. This, as at the previous medical examination, was, unfortunately for the candidate, in the afternoon, and, as was to be anticipated, the urine voided at this time for analysis contained albumen. Had it happened that the medical examination in the first instance had been conducted in the early part of the morning the candidate would have undoubtedly been passed, for there was nothing beyond the condition of the urine that has been described against him. I expressed and recorded in writing my conviction, from what I had seen in other cases, that the candidate's condition was not to be looked upon in the light of ordinary albuminuria, and that it would not interfere with his continuing in the possession of health and ordinary working power. He was not, however, accepted. He had one more chance left him, which was to go in for the examination again in the following year, which his age just permitted. This he did, and came out in a higher position amongst his competitors than at the previous one. When he afterwards attended to be medically examined his urine was free from albumen, and he was passed. In the previous March it had been examined and had also been found free. I have just (July 1st, 1885) obtained an opportunity of seeing the person and examining the urine. Four specimens were brought, derived from what was passed at 7·30 A.M., 1·30 P.M., 5 P.M., and 10·30 P.M. Under ordinary testing they would all be pronounced to be free from albumen; but upon close scrutiny the 1.30 P.M. and 5 P.M. specimens showed just a discoverable impairment of brightness, and the 5 P.M. specimen more so than the other. There had been an uninterrupted enjoyment of good health, and the bodily condition was in every respect satisfactory.

T. F. H——, aged forty-nine, consulted me in February, 1882, with the history that he was the subject of albuminuria, and that it had been noticed that albumen was present at one time and not at another. Although his bodily health had not suffered he had been advised to give up hunting and shooting, and otherwise adopt an invalid

mode of life. He had been in the habit of examining his urine himself with heat and nitric acid, and came with the statement that albumen was to be found between breakfast and lunch, but not in the early morning or at bedtime, or if at bedtime only to the extent of a trace. Finding, by my own examinations, that this was correct, I gave a different prognosis from that which had been given him before, and recommended him to lead a prudent but ordinary mode of life, both as regards exercise and diet. I have watched the progress of this case and examined the urine from time to time. I notice in my case-book that in June, 1883, all the five specimens brought were free from albumen. The last visit to me was in May of the present year, and again I see the report that no albumen was to be found. The general health was good.

In November, 1881, W. H——, aged nineteen, was brought to me by his local medical attendant on account of the presence of albumen in his urine. He had already been taken to a physician, and the father had been alarmed by being told, in answer to an inquiry about the future employment of his son, that he had no future of any duration to look forward to. Investigation showed that in the early part of the morning the urine was non-albuminous. Soon after breakfast albumen began to be perceptible, and a little later on was more abundant. Usually at bedtime the urine was free from albumen, but sometimes a trace was found. In March, 1882, the condition of the urine was the same. There was no sign of any impairment of health. In December, 1883, I was afforded an opportunity of examining the urine again, and there was then an absence of albumen.

C. M——, aged nineteen, appeared in good health, but albumen had been discovered in his urine when being examined for life assurance. I saw him in consultation in March, 1883, and it had been previously noticed by the medical practitioner that the albumen was not always present. The early morning specimen was free, whilst after breakfast albumen was present.

Recently a gentleman, aged twenty-eight, came to me with a letter from a medical practitioner. The letter was dated Liverpool, July 20th, 1885. It ran as follows:—"About a week ago I found albumen in the urine of the bearer. The specimen I examined was passed in the evening, he having had a meat tea and played a few games of lawn tennis. The albumen produced a decided milkiness with picric acid and heat, also with nitric acid, and left a deposit after twelve hours' standing equal to about 1-10th of the urine. The urine was acid, sp. gr. 1025, no sugar, no casts, but a very abundant deposit of octohedral crystals of oxalate of lime. The urine passed the following morning, fasting, had the merest trace of albumen. In the evening, a few days later, the albumen had returned. I had not examined it in the interim. The following morning, fasting, no albumen; but after breakfast, consisting of sole and an egg, the albumen had returned in somewhat larger proportion. . . . So much for the present condition. About four years ago, his life was refused by an assurance society. I examined his urine at that time, and found some sugar in it—a very little; but he has heard that the assurance medical examiner found albumen. He was treated by my late partner for some months, and you then saw him and found nothing wrong with his urine." Reference to my case-book shows that this person came to me in 1881 with the history that sugar had been found in his urine. At the time of his visit his urine was free from sugar. I put him upon a test diet for a few days—that is, desired him to partake freely of starchy and saccharine matters; and still finding his urine free from sugar, I told him that he might consider that he was not the subject of diabetes. He has now come to me as the subject of albuminuria; and my own observation shows, as had been noticed by the medical practitioner who sent him to me, that it is only during a part of the twenty-four hours that his urine contains albumen. The urine passed on rising in the morning of July 24th was of specific gravity 1030, with no albumen, and 6·804 per 1000 of acidity. At 11 A.M. the condition was: specific gravity 1024, a considerable amount of albumen, and acidity 1·701 per 1000. At 5 P.M.: specific gravity 1031, less albumen, and acidity 6·048 per 1000. At bedtime: specific gravity 1023, faint trace of albumen, and acidity 2·520 per 1000. On July 25th, on rising there was again an absence of albumen, the specific gravity 1030, and the acidity 6·930 per 1000. Microscopically, the only abnormal condition discoverable in the several specimens was the presence of oxalate of lime crystals. Such is the information as yet obtained, and upon it I judge the case to fall in the category of those I have been describing. Much to the relief of the patient, I expressed this opinion to him. He is of a highly excitable temperament, and was in an exceedingly anxious state about himself. It is curious that he should have come to me first with reference to sugar, and now with reference to albumen; and I hope that it will turn out that the encouraging terms in which I spoke to him with regard to the latter will prove as well founded as they did with regard to the former.

A case fell under my notice a few months back in which a first impression, based upon a statement of the patient that he was suffering from albuminuria, and that it had been observed that his urine was free from albumen in the early part of the morning, was found on full investigation to be erroneous. It was the case of a gentleman, forty-eight years of age, with a gouty family history, and a presumption that he himself owed his troubles to gout. Albumen had been discovered in his urine in 1879 when seeking advice from a physician regarding the most suitable continental watering-place to visit. Ever since this time albumen has been known to exist, and, as I have mentioned, the patient came to me with the statement that in the early morning the urine was free from albumen. He was the subject of alarming attacks of what he called faintness, of so severe a character as to lead him to think that he was in imminent danger of death from stoppage of the heart. Upon one occasion, when driving in the park, an attack occurred, and he was taken to the house of Dr. Fothergill. I was glad that he fell into the hands of a person so capable of observing the nature of the condition existing, and I learnt from the patient that, notwithstanding the kind of feeling he experienced, his heart was found to be beating forcibly, and he told me Dr. Fothergill had referred the attack to contraction or spasm of the cerebral vessels. As far as the general condition was concerned, the symptoms were suggestive of the existence of gouty or granular kidney, but the urine was of normal quantity, colour, and specific gravity, and at its maximum only contained a slight amount of albumen. My own examinations confirmed the statement that had been made, except that on scrutinous inspection the existence of a faint trace of albumen was perceptible in the morning urine. The microscope, however, revealed the presence of casts of tubules, and this removed the case at once out of the group I am describing.

In what I have stated about cyclic albuminuria I do not mean to imply that this is the only form of albuminuria which is associated with the apparently healthy state. On the contrary, I am of opinion that albumen may be persistently present, and yet not necessarily mean that a grave condition exists. I have seen cases which have afforded grounds for this conclusion. The subject is one which requires the light of further inquiry to be thrown upon it.

THE CRIMINAL RESPONSIBILITY OF THE INSANE.[1]

BY CHARLES J. CULLINGWORTH, M.D., M.R.C.P.,
PROFESSOR OF OBSETRICS AND GYNÆCOLOGY, LATE LECTURER ON MEDICAL JURISPRUDENCE IN OWENS COLLEGE.

GENTLEMEN,—It is by no means with unmixed pleasure that I find myself called upon to deliver the introductory address on this occasion, for I cannot forget that I am occupying this place as the successor of my dear friend and colleague, the late Professor Thorburn. For nineteen years he had held the chair which it is now my privilege to occupy. No one can be more painfully conscious than myself of the difficult task that is in store for his successor. It is no light thing to be called upon to take the place of one whom all acknowledge to have been a singularly clear, practical, and acceptable teacher, and whose private character won for him such universal respect, that his death has impressed all of us who knew him, whether colleagues or students, with a keen sense of personal loss.

[1] An address, introductory to the session (in the departments of Arts, Science, Law, and Medicine), delivered at the Owens College, Manchester, Oct. 6th, 1885.

With regard to the selection of a subject for my address to-day I should have experienced considerable difficulty had it not been for the kindness of the Principal. The usual course has been for the professor to whom the duty of delivering the opening address has been allotted to choose a topic connected with the subject of his chair, as being that with which he is necessarily most familiar. Such a course was in this instance, for obvious reasons, undesirable, and I felt very grateful to the Principal when, with characteristic consideration, he assured me that I should not be expected to adopt it. Being thus freed from the necessity of addressing you on my own special subject, and yet mindful of the injunction of Horace—"Quam scit [quisque] libens, censebo, exerceat artem" ("Let each one do the work he knows the best"),—which Professor Wilkins quoted so aptly and obeyed so successfully last year, I decided to offer some remarks on the criminal responsibility of the insane, making them a sort of last word on medical jurisprudence, the subject with the teaching of which I have been entrusted during the past seven years, and to which, now that I am placed in charge of a more prominent branch of medical study, I, not without some feeling of regret, bid farewell.

The object I have in view in this address is to draw public attention to the extremely unsatisfactory state of the law of this country with reference to the plea of insanity in criminal cases. For many years medical writers of eminence have been uttering their protest against a continuance of the present state of things, and recently one of our most experienced judges has declared a change to be necessary. The chapters in his "History of the Criminal Law of England" in which Sir James Stephen deals with this subject[2] constitute one of the most valuable, and certainly one of the most temperate contributions yet made to the study of the question. Nevertheless, public opinion is not yet fully aroused, and until it is no alteration either in the law or in the methods of procedure can be reasonably hoped for. Let us trust that the reformed Parliament, which may possibly receive an important contingent from the senate of Owens College,[3] will take an early opportunity of endeavouring to bring the law on this question into something like harmony with the teachings of science and the dictates of humanity.

It is admittedly a matter of the utmost difficulty to define with anything like precision the point at which we should cease to regard crime as the result of depravity, and treat the wrong-doer not as a criminal but as the victim of disease. Some writers have gone so far as to maintain that almost every criminal, and certainly every habitual criminal, ought in strict justice to be regarded as only in a very limited sense accountable for his actions; and, looked at apart from the interests of society, from the necessity under which every community lies to protect itself from those who offend against its laws, there is much to be said in favour of this view. It is surely unnecessary at the present day to point out that just as truly as the material brain is the organ of thought or of the intellectual faculty, defect of or injury to certain portions of which is certainly attended with defect of or injury to the intelligence, so too that which has been termed, perhaps not very happily, the moral sense, has its seat in the material brain, and the integrity of the moral sense is primarily dependent upon physical conditions—that is, upon normal and healthy development and upon freedom from injury or disease. If this proposition, stated so nakedly, should seem startling and to savour of materialism, I would remind you that it is merely the statement of a truth that we are practically acknowledging every day. We hear of a child, for example, that betrays from its earliest years the most evil propensities, that no discipline of kindness or severity can train to truthfulness, and that comes eventually to be recognised as altogether exceptional, and neither to be treated by ordinary methods nor judged by ordinary standards, and, learning on inquiry that the child's grandfather was insane or his father a confirmed drunkard, we immediately connect the two facts, and accept the one as the explanation of the other. Yet that child's moral perversion can be the result of inheritance only by being dependent upon some physical defect of brain. Let me illustrate the matter in another way. It is a fact, well known to everyone who has to do with insane people, that in many forms of insanity, due to brain disease, one of the earliest and most unmistakable symptoms is a deterioration of the moral character: the straightforward man becomes deceitful and cunning, the kind and considerate man becomes surly and self-indulgent, the pure-minded man becomes immodest, and the man of even temper becomes irritable and passionate. In attributing these signs of deterioration of the moral sense to a physical alteration which is taking place in the man's brain, we are accepting the truth of the proposition that the soundness of the moral sense depends upon the soundness of the brain; or, in other words, that the moral sense, equally with the intellectual powers, has a physical basis in the brain. A further illustration of the manner in which the maintenance of a correct moral standard may depend upon physical conditions is to be found in the moral breakdown that so frequently occurs as a result of over-strain and exhaustion of the nervous system. The condition to which I refer is graphically described by my friend and colleague, Dr. Ross, in his work on the "Diseases of the Nervous System." "When the nervous system," he says, "is subjected to severe strain and becomes exhausted, the conscience, which is the highest product of the evolution of character, becomes blunted, the power of self-control is enfeebled, and the individual may find that he is in the grip of a great temptation, which may take years of painful struggle to overcome."[4] He goes on to show that when under these circumstances a breakdown occurs, it does so at the weakest point of the man's character, whether that weakness be inherited or acquired. "The varying strength of inherited appetites," he continues, "is admirably stated in an eloquent passage quoted by Dr. Carpenter from Robert Collyer of Chicago. 'In the far-reaching influences that go to every life,' says Mr. Collyer, 'and away backward as certainly as forward, children are born with appetites fatally strong in their nature. As they grow up the appetite grows with them, and speedily becomes a master, the master a tyrant, and by the time he arrives at manhood the man is a slave. I heard a man say that for twenty-eight years the soul within him had had to stand like an unsleeping sentinel, guarding his appetite for strong drink. To be a man, under such a disadvantage, not to mention a saint, is as fine a piece of grace as can well be seen. There is no doctrine that demands a larger vision than this of the depravity of human nature. Old Dr. Mason used to say that as much grace as would make John a saint would barely keep Peter from knocking a man down.'"[5]

The subject is a fascinating one, but I have not time now to pursue it further. I only wish to show that the connexion between crime and disease is much more intimate than at first sight appears, and that those who lay such stress on this connexion as to doubt whether the majority of criminals are actually accountable for their actions can adduce much testimony in support of their view, although their conclusions may be, and no doubt are at present, hopelessly impracticable. At the other end of the scale are those writers, of whom Smollett may be taken as a type, who would under no circumstances accept insanity as an excuse for crime. The passage in which Smollett gives expression to his views on the subject is worth quoting, not only because he is believed to have been the first to express these views in writing, but also because, as he puts the issue very clearly, his statement will afford us an opportunity of examining whether the opinions it embodies rest on any solid foundation. He has been describing the assassination by Earl Ferrers of his steward, Mr. Johnson, whom his lordship believed to be implicated in a conspiracy against him. Everyone who knew Earl Ferrers considered him to be insane. Madness was hereditary in the family, and at the trial the plea of insanity, which he had reluctantly allowed to be set up, was amply supported by witnesses. He was, nevertheless, condemned to death, and his execution took place without his betraying the least sign of contrition. "This unhappy nobleman's disposition," says Smollett, "was so dangerously mischievous that it became necessary for the good of society either to confine him for life as an incorrigible lunatic, or give him up at once as a sacrifice to justice." And then he goes on to say: "Perhaps it might be no absurd or unreasonable regulation in the Legislature to divest all lunatics of the privilege of insanity, and in cases of enormity, subject them to the common penalties of the law; for though, in the eye of casuistry, consciousness

[2] Stephen (Sir J. Fitzjames): A History of the Criminal Law of England, vol. ii., chapters xviii. and xix. London: Macmillan. 1882.

[3] Professor Sir H. Roscoe and Professor Alfred Hopkinson are candidates for the representation of two of the parliamentary divisions of Manchester.

[4] Diseases of the Nervous System, vol. ii., second edition, p. 658.

[5] Ibid., pp. 657, 658.

must enter into the constitution of guilt, the consequences of murder committed by a maniac may be as pernicious to society as those of the most criminal and deliberate assassination; and the punishment of death can hardly be deemed unjust or rigorous when inflicted upon a mischievous being divested of all the perceptions of reason and humanity."[6] I have heard similar views expressed in our own day. Every now and then there occurs a case of homicide by a madman, where the attack was so unprovoked and its details so horrible that the public is seized with a sense of dreadful insecurity, and men begin to wonder whether it would not be a good thing to rid society of any further risk, or trouble, or expense in connexion with this particular madman by hanging him. It might, they think, act as a deterrent on other madmen, and would be as kind to the man himself as consigning him to a lunatic asylum for the rest of his life. With regard to the deterrent effect upon other madmen, there are one or two points of which those who think such an effect possible seem to lose sight. The first is, that under the present system, according to which insanity is nominally regarded as an excuse for crime, a man who is thinking of taking the life of another (and it is chiefly in cases of homicide that insanity is pleaded) has, in case of his being apprehended, tried, and convicted, a sufficiently fearful prospect before him. If the jury pronounce him sane, he will be sentenced to be hanged, and either that sentence will be carried out, or, supposing a successful appeal be made on his behalf to the Home Secretary, the death sentence will be commuted to one of penal servitude for life. If he be found insane, he will be consigned to a lunatic asylum and to the company of madmen for the rest of his days. Surely, nothing can be more likely to act as a deterrent than the prospect either of death or of one of these two dreadful alternatives. But, further, the deterrent influence of a punishment can only come into play in the case of a man who is capable of reflecting before he commits a crime. In the great majority of insane homicides, the capacity for reflection is either annihilated or is in abeyance; no consideration of consequences affects their conduct. And even in the case of that small number who may be supposed in some sort to weigh the consequences of the act they are contemplating, there is abundant evidence to show that death has no terrors for them; they regard it with calm indifference, even if not as a thing to be desired and welcomed. Dr. Guy published some years ago, in the Journal of the Statistical Society, a paper giving an account of a laborious analysis which he had undertaken of the figures supplied by the judicial statistics of this country for a period of seventy years, and the conclusion at which he arrived was that "the punishment of death does not act as a deterrent to the weak-minded and the insane; but, on the contrary, either attracts and fascinates them, or suggests to them thoughts of killing." But there remains yet to be urged what is to my mind the strongest of all arguments against the indiscriminate hanging of sane and insane alike—that, namely, which is based on considerations of justice and humanity. Smollett says that to inflict the punishment of death on a mischievous being divested of his reason cannot be deemed unjust. Whatever men may say as to the "simplicity and convenience" of the method of treating all alike, I imagine few would be disposed to agree with Smollett in upholding its justice. It may be recommended as being "sharp, stern, and cheap," but, as Dr. Guy says, its justice is such "as no painter or sculptor ever yet imagined; the bandage very tight over the eyes, the scales nowhere!"[7]

It must be remembered that Smollett wrote at a time when the treatment of the insane in this country was barbarous beyond description, and when, even in such large and important hospitals as Bethlem and St. Luke's, lunatics were placed in cages like wild beasts, and made objects of public exhibition. A great change has, however, taken place in the management of the insane. The humanity which has built and endowed hospitals for all kinds of bodily disease has been extended to the unfortunate victims of mental disease, and has led to the establishment throughout the country of institutions for their care and treatment, where medical men, second in ability to none in their profession, devote their lives to the study of insanity and to the amelioration of the condition of its victims. All this signifies that a change amounting to a complete revolution has been effected since Smollett's time in the attitude which the community assumes towards the weak-minded and the insane, and a suggestion which one can imagine to have been then received with favour strikes us now as intolerable in its inhumanity.

The truth lies between these two extremes of opinion, and the law recognises this by accepting insanity within certain limitations as an excuse for crime. It is obvious, however, that it would be unsafe to accept the plea without requiring evidence of the insanity, "lest on the one side," to quote the quaint words of Sir Matthew Hale, "there be a kind of inhumanity towards the defects of human nature, or, on the other side, too great an indulgence given to great crimes." Every person, therefore, accused of a crime is held to be sane, and to be legally responsible for his actions until he is proved to be otherwise. In other words, whenever the plea of insanity is set up, it rests with the accused or with those to whom his defence is entrusted to prove the existence of the insanity. I propose now to inquire what amount of proof is necessary in order that the plea of insanity shall be sustained; what are the tests, in short, to which the evidence in any given case is submitted, and whether those tests are in accordance with the present state of our knowledge of mental disease. It will facilitate this inquiry and further the object I have in view if I show, from the records of one or two of the State trials during the last and the early part of the present century, on what principles the decisions of our courts of law have from time to time been regulated in cases where the defence of insanity has been set up. State trials are selected because these are the only trials reported with a fulness and accuracy sufficient for our purpose, and also because, owing to their importance and to the public interest they excited, some of them have become historical.

In the year 1723 a man named Arnold, who appears to have been of weak intellect from his birth, shot and wounded Lord Onslow, and was defended at his trial on the ground of insanity. It was shown that he had been regarded as a lunatic by his family and neighbours for several years previously, but as his insanity had hitherto declared itself in harmless ways, he had been suffered to be at large. "Among other unfounded notions, he believed that Lord Onslow, who lived in his neighbourhood, was the cause of all the tumults, disturbances, and wicked devices that happened in the country..... He was in the habit of declaring that Lord Onslow sent his devils and imps into his room at night to disturb his rest, and that he constantly plagued and bewitched him..... so that he could neither eat, drink, nor sleep for him." Under the influence of these delusions he made the attempt on the life of Lord Onslow, manifesting subsequently no compunction for what he had done. It might be thought that the evidence of insanity here was overwhelming, but the judge was not satisfied. He is reported to have told the jury "that it is not every kind of frantic humour, or something unaccountable in a man's actions, that points him out to be such a madman as is exempted from punishment; it must be a man that is totally deprived of his understanding and memory, and doth not know what he is doing no more than an infant, than a brute, or a wild beast."[8] The jury thereupon rejected the plea, and it was only on the intercession of Lord Onslow himself that the death sentence was commuted to one of imprisonment for life. Clearly, then, the law at that time held an insane person responsible for crime so long as he retained the slightest vestige of reasoning power, although it deprived him, and has ever since deprived him, of the management of himself and his affairs—that is to say, has visited him with civil disability on evidence of a degree of mental incapacity falling far short of such an utter deprivation of reason. It is difficult to find any logical ground for this distinction between the legal consequences of the civil and criminal acts of an insane person. To quote the words of a very able American writer on this subject, it is as if the law said to the insane man: "Your reason is too much impaired to manage your property; you are unable to distinguish between those measures which would conduce to your profit and such as would end in your ruin, and therefore it is wisely taken altogether from your control; but if, under the influence of one of those insane delusions that have rendered this step necessary, you should kill your neighbour, you will be supposed to have acted under the guidance of a sound reason, and you will be tried, convicted, and executed

[6] Smollett's Hist. Eng., 4 vols., Lond., 1848, vol. iv., pp. 347-356.
[7] Factors of the Unsound Mind, p.192. London: De la Rue & Co., 1881.
[8] Ray (Isaac): A Treatise on Medical Jurisprudence and Insanity, p. 15. London, 1839.

like any common criminal whose understanding has never been touched by madness."

The extremely crude notions of criminal responsibility which found expression in the ruling of Mr. Justice Tracy continued to prevail undisturbed for seventy-seven years, when Mr. Erskine, afterwards Lord Erskine, introduced a new test, which was a distinct step in advance. In the year 1800 it may be remembered that a man named Hadfield was tried for shooting at the King in Drury-lane Theatre. Erskine undertook his defence. Hadfield imagined that he was in constant communication with the Almighty, that the world was coming to an end, and that he was called upon to sacrifice himself for its salvation. Not wishing to be guilty of suicide, it occurred to him that if he fired a pistol at the King his life would be taken by others, and thus the Heavenly call would be obeyed. The Attorney-General, in his address to the jury on behalf of the Crown, had enunciated the old barbarous doctrine that to protect a person from criminal responsibility, there must be a total deprivation of memory and understanding; when Erskine replied that if these expressions were to be taken literally, "no such madness ever existed in the world"; and in a speech which has been greatly admired, but which I have not time to quote, he declared that the existence of a delusion, of which the criminal act was the "immediate and unqualified offspring," betokened a sufficient amount of insanity to exempt from punishment. He had no difficulty, of course, in showing that Hadfield's act was the direct outcome of his delusions, and, as a result of his eloquent defence, the judge stopped the prosecution, and the man was acquitted.[9]

The time had not yet come, however, for such a comparatively enlightened view as that propounded by Erskine to be accepted as a legal dogma, and in the next conspicuous trial of a similar kind there was something like a return to the time-honoured criterion. In 1812, the prime minister, Mr. Spencer Perceval, was killed by a madman named Bellingham, under the influence of insane delusions. Bellingham magnified his private grievances into national wrongs, and was convinced that if he could but obtain a public hearing the Government would be compelled by the country to make good his losses. In order to bring this about and to give himself an opportunity of making a statement, he hit upon the idea of assassinating the head of the Government. He was placed upon his trial for murder, and Sir Vicary Gibbs, the attorney-general, conducted the prosecution. In addressing the jury on behalf of the Crown, he declared that "a man may be deranged in his mind—his intellect may be insufficient for enabling him to conduct the common affairs of life, such as disposing of his property, or judging of the claims which his respective relations have upon him; and, if he be so, the administration of the country will take his affairs into their management and appoint to him trustees; but, at the same time, such a man is not discharged from his responsibility for criminal acts. Upon the authority of the first sages of the country," he continued, "and upon the authority of the established law in all times, which law has never been questioned, although a man may be incapable of conducting his own affairs, he may still be answerable for his criminal acts, if he possess a mind capable of distinguishing right from wrong." It will be observed that this dogma, in which the presiding judge, Lord Mansfield, concurred (with the result that the poor madman was executed), is a little less monstrous than that of Judge Tracy. At the same time, it erects a standard of insanity which it is impossible for anyone to reach, and which is tantamount to a refusal to accept insanity, under any circumstances, as an excuse for crime. For some time to come, however, this test took its place in English law among those by which the degree of insanity necessary to exempt from punishment had to be measured.

I pass on now to the well-known case of M'Naghten, who was tried in 1843 for the murder of Mr. Drummond, mistaking him for Sir Robert Peel, from whom he imagined himself to have received an injury. The prisoner was defended by the late Lord Chief Justice Cockburn, and was acquitted on the ground of insanity. A cry of indignation arose throughout the country, and the House of Lords took the opportunity of requesting from the judges an authoritative exposition of the law concerning the plea of insanity in criminal cases. A series of questions was propounded to them, and their replies to these questions have formed, from that time to this, the basis upon which our judges have directed the jury whenever the defence of insanity has been set up. The answers need not be quoted at length; a single passage will suffice to indicate the purport of the whole document. In reply to the second and third questions the judges state that, in their opinion, "to establish a defence on the ground of insanity, it must be clearly proved that at the time of committing the act the party accused was labouring under such a defect of reason from disease of the mind as not to know the nature and quality of the act he was doing, or, if he did know it, that he did not know he was doing what was wrong."

Thus was formulated the test which, although it never found its way into an Act of Parliament, has been treated ever since the year 1843 as though it were the law of the land. Just as the test propounded by Sir Vicary Gibbs was an advance upon that of Mr. Justice Tracy, so again this last authoritative exposition of the law imposed a test which marked a further advance in the direction of humanity and common sense. The test of Sir Vicary Gibbs was the power of distinguishing between right and wrong in the abstract. The test laid down by the judges was the power of distinguishing between right and wrong in reference to the particular act with which the accused is charged. The former constituted a criterion which practically exempts no one; the latter, on the contrary, does every now and then afford a loophole for escape. Notwithstanding, however, that in this respect the more recently propounded test is distinctly in advance of its predecessors, I think I shall be able to show that it is still far from meeting the requirements of the case, either theoretically or practically; in other words, that it is quite out of harmony with our present knowledge of mental disease, and that the results of its practical application are in the highest degree unsatisfactory.

The mental functions of the brain are threefold—intellectual, emotional, and volitional. No one can be said to be of sound mind unless all these functions are healthily performed. The legal test of insanity is simply a test of knowledge. It formulates that popular but erroneous idea of mind which makes it the equivalent of the intelligence, and either ignores the emotions and the will, or, accepting the poetical physiology of Scripture, regards them as functions of the heart, the bowels, and the "reins." If it were a fact that when the mind is disordered the intellectual faculty is the only one that ordinarily suffers, the unscientific character of the test might be allowed to pass unchallenged. But it is not so. On the contrary, it is by no means unusual to find the disorder of the emotions and the will out of all proportion greater than the disorder of the intellect, and this is especially the case in regard to those victims of insanity who are most likely to bring themselves within reach of the criminal law. It is a common experience in lunatic asylums to find that the very persons who are most dangerous to themselves and those about them are the most intelligent inmates in the institution. To apply, therefore, a mere intellectual test to such persons—to discharge, let us say, from an asylum, those who gave no evidence of intellectual deficiency or disorder, would be to let loose upon society a number of person afflicted with the most dangerous of all forms of lunacy.

The practical result of disregarding the faculty of volition is that a person may be, and often is, pronounced to be legally responsible for an act which he had no power to control, and is punished for it accordingly. That I may not be accused of presenting a purely medical view of the question, I will quote some observations of Sir James Stephen on this point. "No doubt," he says, "there are

[9] As much misconception has surrounded this question of the value of delusions as proof of insanity, and as many lawyers of the present day have not got beyond the view propounded by Erskine on the occasion to which I have just alluded, it may be well to state here that although delusions, when they can be shown to be present, do undoubtedly furnish evidence of insanity, the importance of which cannot be overrated, yet it is equally true that insanity of a most dangerous type may exist without delusions. And as to the obligation which, according to Erskine's dictum, would be imposed on the prisoner's counsel of showing that a given act of violence was the direct result of the delusion, of establishing a direct and palpable connexion between them, it is one that it would be often impossible to fulfil, even when such a connexion did really exist. Let me illustrate this by an example. An insane youth conceived such a passion for windmills, that he was never happy or quiet except when he had one within view. To cure him of his infatuation his friends removed him to a place where there were no windmills. He had not been long in his new home before he was arrested for killing and mutilating a little girl. The connexion between a fancy for windmills and such a terrible outrage was not very obvious; nevertheless it existed. The boy's object in killing the child was to ensure his removal from a place where he could find no windmills. To ask an advocate to trace the relationship between an insane act and an insane delusion is to require him to follow the reasoning of an insane mind, a task to which no man in his senses is equal.

cases in which madness interferes with the power of self-control, and so leaves the sufferer at the mercy of any temptation to which he may be exposed, and if this can be shown to be the case I think the sufferer ought to be excused. ..... I do not think," he continues, "that it is expedient that a person unable to control his conduct should be the subject of legal punishment. The fear of punishment can never prevent a man from contracting disease of the brain, or prevent that disease from weakening his power of controlling his own actions.....To threaten such a man with punishment is like threatening to punish a man for not lifting a weight which he cannot move."

(To be concluded.)

A CASE OF

BRONCHOCELE COMPLICATED WITH LARYNGEAL SPASM.

BY W. YOUNAN, M.B., C.M. EDIN.

C. H——, aged sixteen, has suffered with a goitrous swelling for the past seven years. On May 6th last I was called to see her in a fit of "bad breathing," as the patient's brother described it. When seen she lay in bed propped up with pillows. The breathing was extremely laboured, and attended with a loud rattling sound, which could be heard some distance off. The patient could not speak a word, but lay with the mouth widely open and the nostrils dilated; the pulse was irregular and the heart's action laboured. She could not swallow, and had taken no nourishment since the attack. From the patient's mother I obtained the following history. A goitrous swelling had been slowly growing for the last seven years, till it had attained its present dimensions. Every year during the rainy season—that is, from June to August or September—the patient suffered from an attack of "bad breathing." Each attack lasted from fifteen days to a month, and her sufferings during that period were very severe. On the morning in question she attended the funeral of a near relation, and, returning home, partook of a slight breakfast before going to her work (she was a milliner's assistant). Not long after her arrival there she experienced a pain at the epigastrium, and vomited once. Difficulty of breathing then set in and she returned home. I was sent for two hours after, and saw her in the condition above described. The dyspnœa was so severe that I was afraid asphyxia would ensue. Preparing for the worst if it did occur, I determined to try the effect of blistering the neck. Blistering fluid was painted over the tumour two or three times, and the effect watched. In a few minutes I had the satisfaction of seeing the dyspnœa gradually give way and the breathing become natural. I then tried her with some milk, and the patient, sitting up in bed, swallowed two saucerfuls of it with comparative comfort. Since her attack she had not dared to swallow, as the attempt provoked a violent spasm with threatened suffocation. I remained half an hour with the patient, but no recurrence of the spasm took place. On leaving, directions were given to repeat the blistering should necessity arise. In the evening I saw her again, and was informed that three hours after my first visit another spasm supervened, but it yielded rapidly to the treatment ordered. In the intervals between the attacks the patient was fairly comfortable; but any motion, such as raising her head from the pillow or turning on her side, sufficed to aggravate the dyspnœa. She had taken a fair amount of liquid nourishment. Blistering was again ordered when necessary. The next morning's report showed that the patient slept soundly till 1.30 A.M., when another spasm roused her from sleep. This was again subdued by blistering. How long could this treatment be depended on? The entire front of the neck was blistered and could not bear another application of the fluid.

Thinking seriously over the matter, and calling to mind the action of aconite in such spasmodic affections as croup, whooping-cough, laryngismus stridulus, local cramps, and spasms, especially when these are excited by atmospheric or climatic influences, I determined to try the efficacy of the tincture in the present case. It was with much anxiety that I prescribed drop doses of it when the paroxysm threatened. At my next visit I was more than surprised to learn that the "medicine acted like a charm." One dose straightway checked a paroxysm which threatened to be severe. When I saw the patient again in the evening she had gone through another paroxysm; in fact, a second dose of the aconite was administered by myself, as the spasm threatened to linger somewhat, and the patient's breathing was not quite natural. It was a pleasure to witness the rapid action of the drug: almost immediately the troubled, anxious look on the patient's face changed into one of calm repose, and she was able to express her thanks.

From this time forward the patient was able to leave her bed and move about without the least sense of dyspnœa or discomfort. Armed with the aconite mixture, she and her friends expressed no concern about her condition. In fact, three days after her first attack she was able to return to work, while her previous attacks used to extend over from fifteen days to a month. She reported herself to me two or three times subsequently, and stated that she had had no return of the spasm. Whenever the least discomfort in breathing was experienced she resorted to the aconite mixture. I mentioned before that the patient was in every respect well during the dry months of the year. The spasms were in the habit of coming on during the rains, and especially at their close. This year she anticipated an attack, though at the time of her suffering we had a number of rainy days, known as the "chota bursath" or "small rains." On other occasions her sufferings commenced during the "burra bursath" or "big rains," which last from June to September.

My great regret in the treatment of this case is that I resorted to blistering. Had I thought of aconite at first, the patient would have been spared the annoyance and discomfort of large and repeated blistering. But I must confess that the urgency of the symptoms compelled me to act on first impressions. Some, perhaps, might find fault with me for having neglected the use of the great antispasmodic, chloroform. In making my choice of aconite, the following considerations weighed with me. I had previously tried chloroform in a good many cases of asthmatic spasm, and found that, unless the attack was purely neurotic, chloroform had but a temporary effect; whereas, if it was distinctly traceable to atmospheric or climatic exciting causes, such as fog or cold dry air, the exhibition of aconite proved invaluable. The relief obtained in my asthmatic cases was nearly as rapid as that recorded in the present case. I acted upon this hint, and was glad to find it answered all expectation. When Dr. Ringer predicted for aconite a glorious future, he had already multiplied the instances of its remedial application. I trust the subject of this communication may be added to the already long list of the therapeutics of this valuable drug.

A short description of the tumour would be deemed of interest. It has been growing for the past seven years, and commenced as a small glandular enlargement on each side of the neck, situated along the anterior edge of the sterno-mastoid muscle. The right one lay high up under the angle of the jaw, while the left was situated a short distance from the sternal attachment of the sterno-mastoid muscle of that side. The two tumours lay therefore in an oblique direction, the line joining them crossing the right lobe of the thyroid gland. The right and left lobes of the gland participating in the enlargement formed the body of the tumour, of which the two original swellings formed heads, so that the tumour now had a distinctly dumb-bell shape. On the right side it filled the anterior triangle of the neck, but abutted at the base only of the left anterior triangle. It was distinctly movable, and evidently connected with the thyroid body, whose right lobe was much more implicated than the left. In the middle line the neck was free down to the pomum Adami; and on each side the tumour was bounded by the sterno-mastoid muscle. On pressure it was soft and perfectly painless, and was easily drawn up with each act of deglutition.

Calcutta.

THE VACCINATION ACTS.—John Thomas Biggs, a member of the Board of Guardians, was charged at Leicester last week with neglecting the Vaccination Acts. He produced a sworn statutory declaration, stating that he had known cases of injury and death from vaccination, and that he apprehended injury would result to his child if vaccinated. He submitted that this sworn declaration constituted a reasonable excuse as provided by the Acts, but the magistrates held it was not, and made an order to have the child vaccinated.

NOTES OF A CASE OF

FOREIGN BODY IN THE ŒSOPHAGUS, CAUSING DYSPNŒA.

RELIEF GIVEN BY THE SUCUTANEOUS INJECTION OF TARTAR EMETIC.

BY WALTER H. DODD, L.R.C.P., L.S.A. LOND.

M. W——, a lady aged about thirty-two, whilst enjoying "giblet-pie," was suddenly seized with a choking sensation, together with a difficulty of breathing. I was summoned to attend her, whilst undertaking the practice of Mr. Hammersley, about 2 P.M.; it was then half an hour after the symptoms had come on. The patient was sitting on a sofa with a basin in front of her, into which she had spat up a quantity of mucus with here and there a trace of blood. There was no history of hysteria. Her face was much flushed and anxious-looking, and she complained of feeling hot and faint. The patient indicated as the seat of pain a point somewhere opposite the cricoid cartilage. On examining that region with my index finger and thumb, I was unable to detect any prominence behind. In order to ascertain whether she could swallow, and at the same time with the object of producing vomiting, I gave her warm mustard-and-water, but she apparently failed to get any past the obstruction, and the fluid was almost immediately rejected. Warm water, pure and simple, was then tried with the same object in view, but only to be returned with no better result. I now introduced the index finger of my right hand as far as I could reach down the pharynx, but was unable to feel the obstruction. I then tried the œsophageal probang, but that refused to pass beyond five or six inches from the mouth; it was clearly arrested by something of a softish nature, and the patient began to feel that the probang only seemed to lodge the body firmer. Not knowing exactly from her account whether it was bone or meat that caused the obstruction, I introduced a coin bougie, which, being much smaller in calibre than the probang, I hoped to be successful in passing, but this also refused to pass beyond the same distance. I next attempted to promote vomiting by means of tickling the fauces with a feather; but here, again, no effect was produced. After this, there being no very urgent symptoms, I left the house, with the intention, if possible, to procure some apomorphia to use *pro injectione*, but this drug I was unable to obtain unless I sent up to London for it. I then thought of trying some tartrate of antimony, so I had a solution made up with distilled water (1 in 20).

I again visited the house about 6.30 P.M., and found the patient sitting propped up in bed, still expectorating mucus. Her face was now even more congested. She said the pain was greater, and she decidedly had more difficulty in breathing. She constantly affirmed that she was "going to die," and implored me to do something for her. I tried once more to get fluid past the obstruction, but in vain. Having now obtained her permission, having previously explained the risk of an abscess, I injected into the subcutaneous tissue of the left forearm ten minims of the tartrate of antimony solution (equal to half a grain). In less than two minutes a sensation of sickness was produced, and almost immediately afterwards a sudden fit of vomiting came on, which had the effect of expelling a perfect specimen of the heart of a bird. The patient felt at once relieved. After this she began to complain of intense pain at the seat of injection, which extended up her arm, and which at length became so excessive that I had to inject a quarter of a grain of morphia into the right forearm. I also had cold-water dressings applied to the seat of the first injection, and ordered it to be kept wet with the water. A small quantity of cold brandy-and-water was given after the vomiting had lulled, and she was ordered milk and beef-tea. I left the house about 7.15 P.M., but before doing so I informed the friends that the vomiting was likely to continue for a time.

I visited the house the following morning. The patient was then in bed, looked altogether more cheerful, and bore an expression of thankfulness. She complained of slight soreness about the throat, and the region behind the thyroid cartilage was tender on manipulation. She had taken nothing solid. The skin around the injection wound of the left forearm was slightly red and swollen, but there was scarcely any tenderness to the touch. The vomiting had now entirely ceased, and she stated that it had only occurred once or twice since I last saw her. She got up during the day.

I called again two days after, and found the patient up and downstairs. Her throat was still sore; the fauces and tonsils were slightly inflamed, and were treated accordingly with chlorate of potash and acidulated rose-water, &c. Her arm was painful and much more angry-looking, but there was very little swelling. The temperature was 98·8°, and the pulse 84. Poppy-head fomentations were ordered. Three days after my last visit the patient was well, only a trace remaining of the injection wound.

Remarks.—The above case, so far as I am aware, is unique; no other of a similar kind to my knowledge being on record, although some of the text-books hint at such a remedy being tried. The chief interest in this case lies in the fact that the symptoms of impending death from asphyxia were quickly relieved. I think it plainly illustrates the value of tartar emetic, given by injection, for producing almost instantaneous vomiting. Although it is well known that tartar emetic, when applied locally, produces great irritation—often, in fact, giving rise to a pustular eruption,—yet in this case it was remarkable how slight was the irritation, and how easily combated by the above simple treatment. Moreover, its usefulness was proved by the readiness in which the drug is obtainable, as well as the quickness of its action; and I have no doubt, from these facts, that it might be employed in a like manner with advantage in certain cases of poisoning, where the shortness of time for removing the poison from the stomach is all-important, thus allowing the antidotes at the same time to be administered by the mouth. The increased pain that the patient complained of during the passage of the bougie was due, I believe, to the bird's heart, which, having its apex downwards at the narrowest part of the alimentary canal, excepting the sphincters, caused the obstruction by acting the part of a wedge.

Sirhowy, Monmouthshire.

TRACHEOTOMY IN CHILDREN OF AN EARLY AGE.

BY W. F. HEARNDEN, M.R.C.S.

As the results of tracheotomy in children under two years of age are not very successful as a rule, the following two cases which occurred under my care may be of interest. The third case which I append failed. According to statistics collected by Dr. Arnold Hirst Watkins, and published by him in the *Edinburgh Clinical and Pathological Journal* of Dec. 22nd and 29th, 1883, the percentage of recoveries in children aged one year and under is 0 per cent. Of those aged two and between one and two, the recoveries are 8⅓ per cent., as out of seventy-two operated on six recovered. This percentage is arrived at by adding published and unpublished cases together, and are collected from 702 cases. Out of four cases occurring at Chalmers' Hospital, Edinburgh, one, aged a year and two months, recovered. Out of 141 cases occurring in Great Ormond-street Hospital in the year 1864, only three cases of the age of two and under two years recovered—one of thirteen months, one of seventeen months, and one of two years; two were cases of diphtheria and one of laryngitis. Amongst the recoveries and deaths of older children, mention is made of acute laryngeal obstruction. Of course I am aware that a foreign body in the larynx is not the same as disease of that organ, but still I think it might fairly be called acute laryngeal obstruction. In diphtheria, under two years of age, tracheotomy is so seldom successful that my second case seems worth publishing. Dr. Peter Michiel, as quoted by Trousseau, says that in both boys and girls tracheotomy was always unsuccessful when performed on very young subjects. Thus, in fifty-six girls and fifty-one boys on whom tracheotomy was performed at the Children's Hospital (Paris, 1858), it was done fifteen times on girls between two and three years, and eleven times on boys of the same age, and it failed in all. Trousseau, in 1834, operated on and cured a child aged thirteen months, and relates the case in his lectures on Clinical Medicine; also another, a case in which the child was two years old all but six days, on the

very confines of that age in which he said the operation was attended with very little hope of success. Dr. Muslieurat also reported a successful result in a child aged twenty-three months. Dr. Ball, in 1862, operated successfully on a child aged seven months, and Dr. Barthez on a female infant aged thirteen months.

CASE 1.—Francis W. I. P——, aged eleven months and two weeks. On January 7th, 1884, I was asked to go at once to see a child who was choking. As I was starting the child was brought into the surgery, and I was told he had an orange pip in his throat. He was quite insensible, of a deadly pallid colour, and breathing with the very greatest difficulty. Inversion was tried without success. The throat was examined by the finger, but no foreign body could be felt. I then tried to pass a catheter through the rima glottidis, but failed. As the child was just dying, I, as a last resource, performed tracheotomy. He was so insensible that no chloroform was required, although, being fat and the trachea rather deep, the operation took some time. On the windpipe being opened coughing took place, and after the tube was introduced the child soon regained consciousness. The pip was afterwards found on the floor, having been coughed out after the first inspiration. The tube was removed eighteen hours after. Whisky was freely given at first, and the child made a good recovery.

CASE 2.—Eva M. H——, aged one year and ten months. The child had been suffering from croupy symptoms for three or four days, and, in spite of ipecacuanha and sulphate of copper (the latter as recommended by Niemeyer) having been given, she got rapidly worse, and on the evening of Oct. 1st, 1884, it was determined to perform tracheotomy, as both the epigastric and episternal regions were greatly depressed on inspiration, and dyspnœa was extreme. No patch could be seen on the throat, nor were any other persons in the house suffering from sore-throat, although the premises were in a very insanitary condition. Chloroform was given and the trachea opened, with great relief to the little patient. The tube was removed on the fourth day, but had to be replaced on the fifth day, as the breathing was much obstructed. The tube was removed and cleaned three times a day on account of the membrane that collected in it. My friend, Mr. J. Poland, of Guy's Hospital, kindly saw the case a few days afterwards, and gave it as his opinion that it was an undoubted case of diphtheria. Towards the beginning of the fourth week the tube was taken out night and morning, for half an hour at a time, and at the end of the fifth week was taken out for six hours, but it had afterwards to be replaced, and it was not till thirty-eight days after the operation that the instrument could be entirely dispensed with.

CASE 3.—George H——, aged one year and nine months. This was a case of croup. No patch could be seen on the throat. As dyspnœa was extreme, tracheotomy was performed on the evening of March 25th, 1882, with so much relief to the little patient that he was soon sleeping calmly. On the next day he seemed to be doing well, but the tube ultimately became blocked, and he died about forty-eight hours after the operation.

Sutton, Surrey.

FOREIGN BODY IN THE LARYNX; REMOVAL THROUGH TRACHEOTOMY WOUND; RECOVERY.

BY SOLOMON C. SMITH, M.D.

ON July 17th, while I was seeing my out-patients at the Halifax Infirmary, a girl five years of age was brought in suffering from extreme dyspnœa. This had commenced the day before, soon after accidentally swallowing a button. An emetic had been given, but without relief to the breathing, which was becoming more laboured, and for some time she had been unable to swallow. There was extreme obstruction to the respiration which led to great muscular effort, stridor, and working of the nostrils; the skin was moist and somewhat cyanotic; the pulse very quick. Vocal tone was not entirely lost, but the cough was croupy. The laryngoscope showed the vocal cords acting freely, and a dark apparently metallic mass below them. In addition to the danger arising from the already existing dyspnœa, there was the imminent risk of sudden dislodgment and suffocation from spasm of the glottis. I therefore immediately performed tracheotomy. I hoped that after this the foreign body might loosen and discharge itself without further interference. But this not having occurred on the second day after the operation, and the laryngeal mucous membrane having become red and swollen, I took further steps for her relief. Having removed the tube, I passed a probe up the trachea towards the larynx, when I came upon a metallic substance about a quarter of an inch above the upper end of the wound; it was firmly impacted, and the forceps at first failed to dislodge it, but by slightly enlarging the opening it was removed without much difficulty. The substance proved to be a flat metal button, which the child had chewed into a "cocked hat" form with many sharp angles; and these had no doubt caused it to catch and become firmly impacted in the situation where it was found. The healing of the wound was somewhat slow, but she made a good recovery, and was discharged on August 5th.

Halifax.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Prooemium.

MIDDLESEX HOSPITAL.

TWO CASES OF STRANGULATED FEMORAL HERNIA; OPERATION; CURE.

(Under the care of Mr. HULKE.)

CASES of strangulated hernia, of whatever variety, are always of great interest to the practical surgeon. The questions as to the best treatment to be pursued in the particular case under consideration, and, when operation has been decided upon, the best course to be followed in dealing with the condition of bowel or omentum found in the sac, and lastly the treatment of the sac itself, demand the greatest skill and judgment. In one case which we publish there was a considerable flow of fluid from the peritoneum after the return of the gut, but this appears to have been of inflammatory character, and the presence of this fluid did not influence the after-progress of the case. That the fluid did not come from a wounded diverticulum of the bladder was proved by the passage of a catheter into the normal bladder. In neither case does the sac appear to have been removed. For the following notes we are indebted to Mr. Ernest E. King, house-surgeon.

CASE 1.—M. H——, a female aged fifty, was admitted at noon on January 9th, 1885, complaining of severe pain in the right groin, and vomiting. She stated that whilst carrying a heavy parcel the previous evening she had experienced sudden pain in the region already referred to, and on reaching home noticed a swelling there, and shortly after commenced vomiting.

On admission the pulse was 96, temperature 99°. In the right femoral region was a small hard swelling, about the size of a walnut, situated at the outer side and below the pubic spine. No redness apparent; no impulse on coughing; very tender and irreducible. The patient vomited every now and again, but the mucus brought up had no fæcal odour.

At 2 P.M. on the day of admission, the patient having been placed under ether, taxis was tried very gently, but failed. An incision was then made over the inner border of the swelling, and all structures carefully divided until the sac was exposed; this was seen to be remarkably thin, and on opening it no fluid escaped, but a small knuckle of deeply-congested shining intestine was exposed. The constriction was felt for, but so tight was it that it was found impossible to pass either director or knife beneath it. The incision was therefore enlarged to expose thoroughly the lower end of Poupart's and Gimbernat's ligaments, and then it was found possible to pass the knife beneath and notch it, the bowel being easily returned. As this was done, a large quantity (many ounces) of thin yellow-looking fluid escaped, and for a moment it was thought that a diverticulum of bladder

might have been opened (as in the case recorded by Mr. Pott), but the passage of a catheter and withdrawal of some ounces of urine excluded this. The wound was then thoroughly washed out with solution of chloride of zinc (forty grains to an ounce), two drainage-tubes inserted, and the wound brought together with sutures and dressed with iodoform and gauze.

The subsequent course of the case requires little to be said about it. The urine was drawn off for a few days; there was no rise in temperature or pulse; the tubes were both removed by the 12th; the bowels acted on the 16th; and the patient never had any pain or tenderness over the abdomen. The wound granulated and healed by the 21st; and she left the hospital quite well, wearing a truss, on the 23rd.

CASE 2.—S. N——, a female aged fifty-three years, was admitted at 12.15 A.M. on Jan. 10th, 1885, complaining of swelling in the right groin and pain in the abdomen. The patient stated she had suffered from rupture for years. On Monday (Jan. 5th) she noticed the swelling was larger, and her truss would not keep it up. On Tuesday it was larger but softer, the bowels acted, and she got about again; but on the following Wednesday and Thursday she had to keep her bed all day. She had had no vomiting, and passed flatus several times.

On admission there was a large swelling in the right femoral region about as large as a hen's egg, which felt solid. It was tender and irreducible, and received no direct impulse on coughing. The lower and inner end was traceable to the crural opening. The hernia was supposed to be omental, and, the symptoms not being urgent, the patient was placed in bed, the lower end of which was raised on blocks, and an ice-bag applied over the swelling. A pill composed of half a grain of extract of opium was given every four hours to relieve the pain. At 12.30 P.M. she vomited a little mucus, and at 1.30 Mr. Hulke saw her, and advised ether to be administered, and, if taxis should fail, an operation. At 2.30 P.M. ether was given, and, taxis having failed, an incision was made as in Case 1. After dissecting through the subcutaneous fatty tissue, the finger was passed to the edge of Gimbernat's ligament, which latter was divided. The swelling, however, was still irreducible. A further dissection was made, when a hardened mass (probably omentum), about the size of a small chestnut, was dissected out. It was attached by a very slender pedicle, ligatured, and cut away. It was then found possible to pass the finger into the abdominal cavity. The wound was thoroughly washed out with chloride of zinc solution, closed with sutures, and antiseptic dressing applied.—9 P.M.: Temperature 98°; pulse, 96. Patient restless, and in some pain. Half-grain opium pill every four hours if required. Has been sick several times. Ordered a little lime-water and milk. Head to be kept low. To have a little weak brandy-and-water.

March 11th.—9 A.M.: Temperature, 99·4°; pulse, 96. Has had a rather restless night, and been sick several times. Dozed now and again for a few minutes at a time. To discontinue everything except a little ice by mouth. Nutrient suppositories every four hours.

12th.—9 A.M: Temperature, 98·6°; pulse, 80. Only slightly sick during the night, and a little restless. Had two or three opium pills.—10.30 A.M.: Retching less; the patient seems more comfortable.—11.30 A.M.: Bowels acted; motion small and semi-solid. Wound dressed; complete absence of inflammatory redness or swelling. Belly soft and free from tenderness.

Feb. 10th: Since last note the patient has gone on remarkably well, the further progress of the case calling for no detailed account. The wound has completely healed. The patient leaves the hospital to-day.

TORBAY HOSPITAL.

SIX CASES OF SUPRA-PUBIC ASPIRATION OF THE BLADDER FOR RETENTION OF URINE; REMARKS.

FOR the following cases we are indebted to Mr. THISTLE.

CASE 1.—J. R——, aged twenty-eight, was admitted on Feb. 3rd, 1883, with acute retention. No catheter could be passed, so he was tapped above the pubes with an aspirator trocar, and his symptoms relieved. The operation had to be repeated three times on subsequent days, as attempts to pass an instrument were always followed by severe rigors. His stricture had existed some years. The tapping was followed by no ill effects.

CASE 2.—J. S——, aged thirty-three, was admitted on June 24th, 1883, suffering from acute retention. The stricture had existed three years, and the stream latterly had been very small. No instrument could be got into the bladder, so he was tapped above the pubes. No ill consequences followed. After a few days' rest a small catheter was introduced and held in, and the stricture rapidly dilated. He was discharged on July 17th and provided with a No. 10 gum-elastic catheter to pass for himself.

CASE 3.—J. K——, aged twenty-eight, was admitted at midnight on July 7th, 1883. He had driven twelve miles from a neighbouring town. Several surgeons had previously made unsuccessful attempts to get in a catheter. His bladder was distended above the umbilicus, and he had suffered intense agony during the drive. The bladder was punctured at once, without any attempt to pass an instrument, and over three pints of urine drawn off. No bad effects followed, and he left the hospital in a few days, refusing to stay or to have the stricture dilated.

CASE 4.—R. N——, aged twenty-five, was admitted August, 6th, 1883, with acute retention. Stricture had existed for some years, and was now aggravated by drinking. No instrument could be got into the bladder, so he was tapped above the pubes with the aspirator trocar, and the urine drawn off. This had to be done a second time before an instrument could be passed. The stricture was afterwards dilated, and he was discharged cured August 28th.

CASE 5.—S. S——, aged seventy-three, was admitted into the hospital on Aug. 6th, 1883. He was suffering from retention due to enlarged prostate. He also had valvular disease of the heart and dropsy. No instrument could be passed, so he was tapped above the pubes. No bad effects followed, and he improved after a few days' rest in bed, and was able to pass his water without discomfort.

CASE 6.—R. P——, aged forty, admitted Jan. 19th, 1884, suffering from acute retention. Stricture had existed some years, and the retention was brought on by drinking. After trying without success to pass a catheter, he was tapped above the pubes. No ill consequences followed.

Remarks by Mr. THISTLE.—These cases, which occurred in the Torbay Hospital during the period of my house-surgeoncy, will serve to corroborate the remarks of Mr. J. T. Hayne on the value of aspiration of the bladder in cases of retention of urine. In the above six cases it will be seen that the operation was resorted to ten times. The instrument used was a long fine aspirator trocar and cannula. On removing the trocar the indiarubber tube was attached to the cannula, through which the urine ran into the vessel. On removing the cannula a pad of lint was strapped over the seat of puncture, and left on for twenty-four hours. In no case did the least ill effect follow. The operation is much more simple than puncture through the rectum, much less unpleasant to the patient, and equally safe.

BECKETT HOSPITAL, BARNSLEY.

FATAL CYSTITIS APPARENTLY DUE TO PHIMOSIS.

(Under the care of Dr. SADLER.)

WILLIAM M——, aged seventy-seven, was admitted on April 22nd. His story was that he had had a very long prepuce all his life, but it had given him no inconvenience. Though for some years subject to frequent micturition by day and night, he had never been aware of any difficulty in expelling urine. Had been in failing health some months, and for several weeks his foreskin had been swollen and he had been unable to pass more than a few drops of urine at a time. He was a very feeble old man, and was very much collapsed on admission. On his hands and feet were numerous small, dry, brown fissures, as if from commencing dry gangrene. The prepuce was very long, œdematous, hard, and inflamed. It barely admitted a small probe. Bladder much distended. A fine curette was passed into the prepuce, and it was divided to its base. Then a No. 12 English silver catheter was passed without any obstruction into the bladder, and several pints of intensely fetid purulent urine withdrawn, with some decomposed clots. The bladder was washed out. The washing was repeated several times during the next twenty-four hours, but he never rallied from his collapse and died quietly next day. No autopsy was permitted. There were no calculi in the prepuce, nor could any be felt with a sound in the bladder.

Medical Societies.

CLINICAL SOCIETY OF LONDON.

Hæmatemesis and Melæna in the Newly Born.—Strangulated Umbilical Hernia treated by Excision of Sac and Skin Covering.—Treatment of Lacerated Middle Meningeal Artery.

THE first meeting of the session of this Society was held on the 9th inst., Mr. Thomas Bryant, F.R.C.S., President, in the chair. In opening the session the President remarked that the executive of the Society had not been idle, for he was enabled through their industry to place before its members a copy of the new volume of the Transactions of about twice the size of any previous volume. At the next meeting the question will be voted upon whether tea and coffee shall be provided before or after the meeting. A long discussion ensued on the reading of Mr. Lucas's paper, in which the Guy's surgeons figured largely and disagreed not a little.

Dr. SAWTELL read a paper on a case of Hæmatemesis and Melæna in a new-born infant. A small, male child, born April 9th, 1885, after a natural, but rather tedious, labour, suddenly vomited blood twenty-one hours and a half after birth, and a few hours later melæna supervened. Up to this time milk was taken, and vitality seemed but slightly impaired. The discharge of blood continuing, much altered by admixture with meconium and mucus, the child rapidly sank, and died within twenty-four hours from the first appearance of blood. Besides general measures, sulphuric acid was given in tincture of cardamoms. The stomach alone showed casual lesions—viz., small, but deep, round or oval ulcers on the posterior wall of the cardiac end, near the lesser curve. Dr. Sawtell remarked that, after some examination of the subject, he had failed to find any record of a similar case. He quoted Billard's paper in the *British and Foreign Med. Chir. Review* for 1853, in which Rahn-Escher states that softening of the stomach and bowel is sometimes found. An interesting case observed by Dr. Richard Neale revealed no lesion of any kind. Dr. Edis and Dr. Thorburn, in the *Brit. Med. Jour.* for 1879, deal with spurious hæmatemesis. But records of true intestinal hæmorrhage in infants as so rare that Dr. West relates only three as occurring in his extensive practice, and only one of these in the new-born. Finally, Rilliet's elaborate essay does not give any cases of ulceration. The author inclined to the opinion that the ulcers arose from portal obstruction and erosion by gastric juice, and concluded his paper by pointing out the difficulty of diagnosis and treatment, and the truth of Dr. West's observation that the new-born suffer less from the effects of hæmorrhage than might be expected.—Dr. RADCLIFFE CROCKER thought that these cases were analogous in their pathology to purpura neonatorum, in which hæmorrhages took place into the skin a few hours after birth apparently as the result of the circulatory disturbances which occur at birth. Purpura usually ran a favourable course. Most likely some obstruction of the branches of the portal veins was the cause of the gastric erosions in the case read.—Dr. EDIS referred to cases of spurious hæmatemesis in which the blood came from the sore nipple of the mother.—Dr. SAWTELL briefly replied.

Mr. CLEMENT LUCAS read notes of two cases of Strangulated Umbilical Hernia, treated by excision of the sac and skin covering, with suture of the ring, after reduction. He began by stating that for several years he had been in the habit of excising the sacs when called upon to operate for strangulation in all cases of hernia, and that he had been led to do so not so much for the purpose of producing a radical cure (though this was an advantage) as to lessen the mortality from the operation. He regarded the sac itself as a danger, from its badly nourished texture, its tendency to suppurate or slough, and its liability to collect discharges and guide them into the peritoneal cavity. To rid the patient of this abnormal, over-strained, ill-nourished, not only useless, but absolutely injurious piece of tissue, should be the aim of every surgeon when called upon to operate for strangulation, after reducing the bowel. To speak of such a proceeding as "unsurgical" was a wanton misuse of the adjective. It was probably the only operation for radical cure that would bear the test of time. He regarded no operation for femoral hernia complete till the sac had been excised, even though the bowel might have been reduced before opening the sac. The same might be said of acquired inguinal hernia. The congenital inguinal presented especial difficulty, as the whole sac could not be excised without sacrificing the testicle, but he usually excised the funicular portion, and rigid antisepsis was here advisable. The first case was of peculiar interest, inasmuch as the operation was performed on a patient in an advanced stage of dropsy from Bright's disease. It might be studied with a case reported in the Guy's Hospital Reports for 1879, p. 332. A married laundress, aged forty-eight, began in June, 1883, to suffer from dropsy. In July, 1884, paracentesis abdominis was performed. She was tapped a second time in February, 1885, and a third time on April 9th of this year, when eighteen pints of fluid were withdrawn. On May 22nd, at 4 A.M., the umbilical hernia, which she had had some years, became strangulated, and Mr. Lucas operated at one o'clock, having failed to reduce it by taxis. It was found necessary to open the sac, when a considerable quantity of fluid escaped, and a large piece of purple small intestine came into view. The opening was enlarged so far as to admit the finger into the abdomen, but, owing to the water-pressure behind, it was found impossible by manipulation to reduce the bowel. Finding the obstacle to reduction was the peritoneal fluid, Mr. Lucas placed the patient on her side, and holding the intestine on one side, with his finger passed through the aperture, allowed in this way three and a half pints of ascitic fluid to escape. After this the bowel was easily returned. He then cut away the whole of the sac, and afterwards all the thin distended skin. Three stout chromicised catgut sutures were next passed through the margins of the umbilical opening to the peritoneal surface, tied, and cut short. The skin margins were then brought together with wire sutures. Carbolic spray and antiseptic dressings were used. Sickness ceased at ten the next morning, and the patient was comfortable. All the wire stitches were removed on the sixth day, and the wound appeared to be healed, although the urine still contained one-third albumen and some blood. A few days later slight suppuration took place, and the cause proved to be one of the catgut stitches, which came away unchanged on the fifteenth day. After this she gradually improved, and left the hospital on July 25th, at which time there was no tendency to protrusion at the umbilicus. The second case was that of an exceedingly stout plethoric woman, aged fifty-two, who was admitted into Guy's Hospital on Sept. 6th, 1885. While lifting a heavy pole of clothes, eleven years ago, she felt something give way at the umbilicus. Since that time she has on four occasions required chloroform for the reduction of the hernia, which was of large size. The last time it was thus reduced was in August, 1884. At 10 A.M. on Sept. 5th, as the result of a severe fit of coughing, the rupture became distended and irreducible. She was seized with severe pain over the stomach, and vomiting occurred soon after and continued till her admission at 7 P.M. on the following day. The hernia was of large size and uneven on the surface, four inches by three in diameter, tense, devoid of impulse, and tender on manipulation. Taxis having failed both before and after the administration of chloroform, Mr. Lucas proceeded to operate at nine o'clock in the evening. A vertical incision, about four inches in length, was made at the upper part of the tumour, and the sac being exposed, the ring was divided outside, and taxis again applied without success. The sac was then opened, and some blood-stained fluid escaped. The sac was found to contain a large mass of adherent omentum, forming an omental sac, within which the bowel was strangulated. After division of the stricture several feet of dark-coloured intestine were reduced; the transverse colon then appeared in the sac, but it was not strangulated. Two large pieces of omentum were then ligatured with green catgut and cut away. The sac was next separated from its connexions, and cut away, except at the lower part, where the adherent omentum made it impossible completely to remove it. Three stout green catgut ligatures were then passed through the edges of the aperture to the peritoneal surface, and the opening thus closed, the stumps of adherent omentum and sac being left outside. The skin was cut away and its edges brought together with wire sutures and an aperture left for drainage at the lower front. Carbolic spray and antiseptic dressings were used. She had no sickness after the operation, and was quite relieved from abdominal pain, the abdomen re-

maining soft and free from tenderness. On the 10th there was a rise of temperature, and on being dressed some blood-stained discharge escaped from the lower part of the wound. After a week a slough came away, evidently the remnant of the sac and stump of omentum. After this she rapidly improved, and had a normal temperature. Her bowels acted on the 15th. On the 23rd the drainage-tube was removed. On the 27th she got up and was practically convalescent. The cases illustrate the value of removing the sac and closing the abdominal aperture. Neither patient was in a good condition for operation, one being in an advanced stage of dropsy from heart disease, the other exceedingly fat and flabby. In both a large quantity of bowel was strangulated, and in one the hernia was much complicated by adherent omentum. In both some suppuration occurred, and in one sloughing; yet no suppuration extended to the peritoneum, as would probably have been the case had the aperture been left patent.—The PRESIDENT congratulated Mr. C. Lucas on the success of what might be called a modern treatment of strangulated umbilical hernia. He thought the discussion should be limited to the treatment of strangulated umbilical hernia.—Mr. GOLDING BIRD said that he would endorse the line of practice of removal of the sac, but he could not concur in Mr. Lucas's explanation. The septic material that caused peritonitis might be introduced from the bowel, and not from the external opening. The inflammation, indeed, commenced in or about the strangulated bowel. In the second case a large slough came away from the detached omentum, and this did not strengthen the author's line of argument. In other forms of hernia he considered that removal of the sac ought also to be carried out. It was a practice that he had for some years adopted.—Mr. WALSHAM said that he had operated for hernia with removal of the sac at least twelve times. Of these, three were umbilical, seven were femoral, and two inguinal. He cut away the whole of the sac, and pared the edges of the tendinous ring. He opined that there was some danger of catgut failing, at all events in femoral and inguinal hernia; carbolised silk was the material that he used and recommended. Although in one of his cases the final result was death, yet the wound on the peritoneal surface was quite obliterated by union at the first intention. He had seen the other two cases some months after operation; they were without trusses, and yet there was no sign of the return of the hernia. Unless the case was seen long after the operation, and unless no truss were worn, he should not regard any particular case as a radical cure.—Mr. MAKINS had operated recently for strangulated umbilical hernia. The patient died three weeks afterwards from hæmoptysis. The operation was performed essentially in the same way as that advocated by Mr. Lucas. The wound healed perfectly.—Mr. BALLANCE made mention of a case of strangulated umbilical hernia in a woman aged fifty. The tumour was of the size of a cocoanut. The operation was performed with antiseptic precautions. The contents of the sac were six inches of small intestine with much omentum. The obesity of the individual made the operation difficult. He succeeded, however, in removing the whole sac and many square inches of the skin. He taught that the whole sac, a good area of the skin, and as much omentum as possible should be removed. He had recently seen his patient, and there had been no return of the hernia.—Mr. CHARTERS SYMONDS narrated cases that had been under his care. In one case of strangulated umbilical hernia the tumour consisted of two parts; the one on the right side was over the umbilicus and irreducible; this compartment contained the strangulated bowel, which was a protrusion from a larger and central cavity situated to the left; the communication was through a rounded aperture. The sac was completely excised, and the patient did well. In a second case there were also two swellings—a mesial and a sinistral; the latter was an independent ventral hernia, and the septum between the two could not be removed. He used catgut to unite the wound. When the sac was small it was not necessary to remove it. In femoral herniæ he always removed the sac. If the method of removal without suture were adopted, he failed to see how that could be a radical cure. In a case of the kind that he had heard of the hernia returned. He advised carbolised silk, wire, or catgut, according to circumstances.—Mr. WALSHAM explained that he only referred to umbilical hernia.—Mr. R. J. GODLEE thought that complete separation of the sac was not an easy thing to do, for the peritoneal sac was so closely united to the skin over a large area. In some cases it was impossible to bring together the edges of the aperture in the abdominal wall. Reference was made to a rare kind of umbilical hernia, of which he had seen at least two cases in children. The hernia descended into a sac formed by the stump of the umbilical cord. In one case in which he operated the contents were found to be the cæcum and vermiform appendix. He separated the sac at the neck, and brought together the edges of the aperture.—Mr. HOPKINS spoke of a case of umbilical hernia, for which he made a semicircular incision half an inch from the neck of the sac, and this not sufficing for the reduction, the linea alba was also divided, and then the hernia was reduced. The patient was seventy years of age, and had softening of the brain, but recovered completely from the hernial operation.—Mr. T. BRYANT said that strangulated umbilical hernia was the most dangerous form of hernia that a surgeon had to deal with. He would be sorry to adopt the rule of Mr. Lucas in all cases of strangulated umbilical hernia, for he believed that the surgeon could do better with the minor operation in many of the cases. He had had a considerable amount of success by the ordinary method of dividing the stricture; and in the aged and fat this method was to be preferred.—Mr. A. E. BARKER thought that the difficulty of dissecting the sac from the skin in front should not be urged against the operation. In his practice, he had taken away the bulk of the sac; the connexion between the sac and the skin was quite lax for an inch from the neck of the sac; over the rest of the sac the skin was very adherent, and the two together formed a thin, almost transparent covering to the hernia.—Mr. HOWSE argued that each case of strangulated umbilical hernia should be treated on its own merits. He would be sorry to adopt "wholesale" the treatment that Mr. Lucas had advocated. In cases of recent strangulation, where the parts of the sac were healthy, he did not advise removal of the omentum and sac, for such a procedure would increase the risk of the operation by making a larger aperture, and from the operator sometimes not being able to bring the edges of the wound together. Cases of strangulated hernia should not be left more than a few hours before being surgically treated. Delay constituted the risk. The major operation ought, in his opinion, to be restricted to those cases in which one finds a quantity of fluid in the sac, the omentum foul-smelling, and the intestine congested.—Mr. LUCAS, in reply, considered that it was not necessary to pare the edges of the wound, as no better healing surface would be obtained. The existence of an aperture was not necessarily followed by septic inoculation, though in femoral hernia there was not the same tendency to the inception of septic material. If, as Mr. Bird pointed out, the intestine is diseased, it should be remembered that the intestine lies close to the aperture, and so may meet with the septic agency from without. In the case in which the slough was present there was yet no spread of inflammation to the peritoneum. Green catgut was sufficient in his opinion, and carbolised silk should not be employed. Removal of the sac was of the first importance, for the sac from being badly nourished, tended to increase the chances of septic inflammation. The mortality of hernia would be greatly reduced, he believed, if his operation were carried out in all possible cases. Moreover, he considered that it was sufficient to cut away the sac without employing sutures, provided the truss be put on fourteen days after the operation. He was much surprised to find Mr. Howse coming out as a conservative surgeon; if he understood him aright, it was only in the serious cases in which the omentum and intestine were greatly damaged that the major operation should be performed; with this view he could not agree.

Mr. CHARTERS SYMONDS read a case of Trephining for Compression by a Clot derived from the Middle Meningeal Artery, and suggested the resort to compression or closure of the carotid as a means of arresting the hæmorrhage. A man, aged forty-three, fell from a height of six feet, striking his head. He was admitted immediately into Guy's Hospital, and was seen shortly after in a totally insensible condition, with right hemiplegia and a pulse of 52. He had two abrasions on the left temporal region, and a large extravasation of blood. Though there had been no conscious interval, Mr. Symonds immediately trephined on account of the hemiplegia and deepening coma. The site selected was rather posterior to that usually chosen, as here the chief injury seemed to have been received. On elevating the disc of bone a pulsating clot was exposed and removed. The bleeding was profuse, and to reach the laceration a great

deal of bone was removed by Hoffman's forceps, two loose pieces of the sphenoid being found. Two lacerations were found in the vessel; one was closed by under-running the vessel with fine gut; the other by completing the division of the vessel and twisting both ends. The bleeding, however, still continuing, and the bone having been incised to the base, the hæmorrhage was finally arrested by under-running the artery with a piece of the dura mater, and making traction on the ligature carried out of the wound, and by a pair of torsion forceps pushed down into the farthest accessible point and given a half twist. The operation altogether lasted two hours, and the man lost much blood. Recovery was immediate. As soon as the clot was removed the pulse rose from 40 to 64, and the muscles of the right foot moved; and at the conclusion of the operation the man could move his right arm and leg, and give his name and address. The next day he answered all questions and spoke rationally. The same afternoon he became restless, and finally delirious, coma supervened, the temperature rose gradually, reaching 104·8° shortly before death, which took place at 3.15 P.M., or fifty hours after the accident. At the autopsy the dura mater over the exposed area was yellow and purulent, and there was general congestion. The tempero-sphenoidal lobe on the right side was bruised, as was the cerebellum. The fracture extended from the site of the operation to the wing of the sphenoid, and there divided into two branches, one running over the orbital plate to reach the cribriform plate of the ethmoid, the other reaching the same point after traversing the optic foramen and sphenoidal fissure. In his remarks Mr. Symonds said that his main object was to call attention to the want of information upon the best method of dealing with the bleeding vessel, and to suggest a resort to compression of the carotid from the moment such a case is seen, and to its ligature, should, after trephining, other means fail to arrest the bleeding. Though no mention was made in our leading works of this method of arresting the hæmorrhage, no doubt the idea had occurred to others before it had to him in connexion with this case two years ago. To the severity of the operation, to its great prolongation, and to the loss of blood he attributed the fatal meningitis, and did not think that the result affected the average success of trephining. As to whether it would be better to secure the external or common carotid, he thought that while deligation of the external would remove the special cerebral dangers attending closure of the common, its safety was yet to be established. He considered that with our present method of treating wounds he would prefer to close the external carotid. Mr. Furneaux Jordan's suggestion to ligature the carotid instead of trephining, while it was thought effective, would, Mr. Symonds considered, be confined to those cases seen very early, and would therefore have but a limited application. The absence of the interval of consciousness was considered to be due to concussion, while the strictly localised character of the paralysis was unlike that seen in cases of cerebral laceration. —Mr. HOWSE narrated two cases bearing on those of Mr. Symonds. The first was that of a boy, aged ten, who fell down a hatchway eighteen hours before admission. He was taken in comatose, with unequal pupils and rigid limbs, but with convulsive movements only in the right arm and leg. Trephining was performed over the left parietal eminence, and much blood-clot was removed, but the bleeding continued. Relays of assistants digitally compressed the left common carotid artery for three hours. In the evening he was able to move the right arm and leg. The boy did well so far as restoration to general health was concerned, but the right arm and leg gradually developed a spastic state. The second was that of a man, aged fifty-one, who slipped accidentally and pitched on to his forehead. On admission there was drowsiness without paralysis, much effusion under the scalp, with bleeding from the right nostril, but none from the mouth or ear; the pupils were normal, the pulse slow and laboured. Insensibility increased; the breathing became stertorous; right hemiplegia, with some spasm, developed. The skull was trephined over the left parietal bone. A large clot of blood was removed, and there was much bleeding. Pressure and cold failed to stop the hæmorrhage. A second operation was performed three hours after the first, and more bone was removed. Several branches of the middle meningeal artery were ligatured. This procedure failed to staunch the bleeding. Mr. Howse cut down on the external carotid artery and ligatured it. The hæmorrhage immediately ceased. The patient, however, did not recover consciousness, and died about twenty-four hours after the accident. At the autopsy the left parietal bone was found to be separated from the frontal bone at the coronal suture, and the right also for about an inch. A fracture also ran obliquely backwards across the parietal for about three inches; the bone was not depressed. Some clots still remained under the dura mater. The under surface of the left middle cerebral lobe was much bruised for a depth of half an inch.—Mr. BRYANT remarked that in a recent American publication there was an article on ligature of the carotid artery for hæmorrhage of the kind in question.

Reviews and Notices of Books.

A Practical Treatise on Diseases of the Kidneys and Urinary Derangements. By CHARLES HENRY RALFE, M.A., M.D. Cantab., F.R.C.P., Assistant-Physician to the London Hospital, formerly Senior Visiting Physician to the Seamen's Hospital, &c. London: Lewis. 1885.

IN this volume Dr. Ralfe proposes to present the student and practitioner with a clear and concise account of urinary pathology and therapeutics, based upon the latest ascertained facts and supported by the best authorities, and we congratulate the author upon the manner in which he has carried out his intention. It is an excellent *résumé* of present knowledge of renal diseases and their management, and most of the points on which differences of opinion still exist are discussed very fully and fairly, without any obvious personal bias. Indeed, were we to indicate the direction in which we think the book somewhat unsatisfactory, it would be in the evident wish of the writer to say a good word all round, and not to obtrude personal opinions, which must tell on one side of a controversial point or on the other. For instance, on the question of the hyaline-fibroid arterial change in chronic renal disease of Sir Wm. Gull and Dr. Sutton, or the muscular hypertrophy of Dr. G. Johnson, our author is evidently only too glad to believe that sometimes one appearance is present, and sometimes the other. He would not on any account venture to suggest that either authority could be wrong. It is possible that this is the true solution of the difficulty in question, but a more decided treatment of the important pathological changes would have had greater weight with the reader. In his chapter on the Clinical Examination of Urine, Dr. Ralfe speaks with all the authority of an expert, and we can heartily recommend it as one of the most thorough and trustworthy essays on this important subject that has come under our notice. Dr. Johnson's picric acid test for sugar might have been at least described in the appendix, and not relegated to Clinical Chemistry (p. 157). We have doubts whether chronic *tubal* nephritis in its ultimate form of pale granular kidney is so common as a student would suppose from Dr. Ralfe's remarks, and the chapter on Abnormalities of the Kidney might have been made more complete. The explanation of chyluria is also a little vague and unsatisfactory, little notice being taken of the anatomical difficulties which are involved in the solution of this peculiar affection. The work, however, is on the whole singularly well judged in its proportionate treatment of the various diseases of the kidney, both usual and unusual, and can be thoroughly recommended as an excellent guide to the study of urinary pathology and therapeutics.

The Student's Guide to Medical Jurisprudence. By JOHN ABERCROMBIE, M.D. Cantab., M.R.C.P. London: J. and A. Churchill. 1885.

Outlines of Medical Jurisprudence for Indian Criminal Courts. By J. D. B. GRIBBLE, Madras Civil Service (retired). Madras: Higginbotham and Co. 1885.

DR. ABERCROMBIE'S small work is a clearly written and concise compilation from the larger text-books on the subject of Forensic Medicine, and the author has, as he informs us, largely quoted from the works of Taylor, Guy and Ferrier,

Tidy, Casper, and others. Illustrative cases are added to the various sections, many of them being of quite recent occurrence. About one-third of the work is devoted to the toxicological part of the subject, and this is very carefully dealt with. Some of the other articles are perhaps more brief than their importance demands—notably that on Rape. Since the publication of the work an important alteration of the law with regard to the age of consent by a female has been made by the Criminal Law Amendment Act. The work is, as the author tells us, chiefly designed for the use of students, and doubtless it will be of assistance to them in preparing for the examinations of the various licensing boards.

Mr. Gribble had intended to compile a handbook of Forensic Medicine with the late Dr. Rogers, the chemical examiner of Madras, but his unfortunate death in 1883 left the whole work to be undertaken by Mr. Gribble. He dedicates it to the native magistrates, vakeels, and police, but the book contains much of interest to medical men as well as judicial officers. Mr. Gribble remarks as to evidence in India, that "the great difficulty is the false evidence. It is probably no exaggeration to say that a case scarcely ever comes before a criminal court in which there is not a certain amount of false evidence." False confessions, too, are not uncommon: "In Europe it sometimes happens that a man will make a false confession of a crime that is occupying public attention. In this country, however, confessions are sometimes made simply because the accused know there is a strong suspicion against them, and think that possibly by confessing they may get off the extreme penalty." Infanticide in India is very common: "It is of two kinds—female infanticide, which is being gradually stamped out, and infanticide of illegitimate children, which prevails to a very large extent, and will probably continue so long as there exists a prohibition against the remarriage of widows." In India there is no restriction as to the sale of poisons; arsenic especially is a frequent cause of death, suicidal, homicidal, or accidental; and "cattle poisoning by arsenic is a crime of frequent occurrence, and is generally practised by the Chucklers, who are entitled to the skins of all animals that die in the village." Mr. Gribble has been assisted in the section on poisons by Surgeon-Major McNally, and this section contains some interesting matter on poisoning by snakes and fish. Mr. Gribble's work is one which will no doubt be a useful guide to those officers who are engaged in judicial functions in India, and to many medical officers in the Indian Service. It is well and clearly written, and we can recommend it to all who are interested in magisterial work in India.

OUR LIBRARY TABLE.

Croonian Lectures on the Hygienic and Climatic Treatment of Chronic Pulmonary Phthisis. By HERMANN WEBER, M.D., F.R.C.P. London: Smith, Elder, and Co. 1885.—The interest excited by Dr. Weber's lectures, when delivered at the College of Physicians last spring, should ensure for them, now that they are republished, a wide circle of readers. The subject dealt with is one of abiding interest, and the desire to ameliorate the hapless condition of the victims of consumption is universal. Dr. Weber speaks with authority, and all his conclusions are based upon sound scientific observation. He does not, therefore, hold out any delusive hopes of a panacea or rigidly prescribe a particular course for general application; but he points the way in which it is possible to afford relief, to prolong life, and even to arrest the progress of tubercular disease of the lungs by means of a strict attention to the surroundings of the patient. The ground covered by these three lectures is the same as that of M. Jaccoud's well-known work; but the former have the merit of a brevity and conciseness which are sadly lacking in the latter.

Tracheotomy in Laryngeal Diphtheria; After-treatment and Complications. By ROBERT WILLIAM PARKER, Surgeon to the East London Hospital for Children and to the Grosvenor Hospital for Women and Children. Second Edition, revised and considerably enlarged. London: H. K. Lewis, 1885.—The author's enlarged experience has only confirmed him in the correctness of his previous opinion that diphtheria in all its stages demands active local treatment. He is not only an advocate for tracheotomy in well-selected cases, but he emphasises the fact that the surgeon's aim in performing the operation is not merely to insert a tube into the trachea, but also to remove all false membrane from the larynx and trachea, and as far as possible to prevent its re-formation, at any rate to prevent its further lodgment. The success attending this mode of treatment has been very satisfactory in Mr. Parker's hands, and those who carefully read his book and weigh his arguments will be impressed with the cogency of his reasoning. Much valuable information on the best ways of dealing with the various difficulties and complications of tracheotomy is contained in the book. Mr. Parker has made a free use—in our opinion a too free use—of modifications of type and of spacing with a view of arresting the reader's attention.

Practical Manual of Diseases of Women. By H. MACNAUGHTON JONES, M.D. 1885. Second Edition.—We expressed our opinion of this work in THE LANCET of August 16th, 1884, p. 277, and the second edition does not change it. The scope of the second edition includes some affections of the rectum and mammary gland, some remarks on the etiology of dysmenorrhœa, and a description of the operation of shortening the round ligaments.

Woven in Darkness: a Medley of Stories, Essays, and Dreamwork. By W. W. FENN. In two volumes. London: Kelly and Co.—Whether the deprivation of sight, under which the author of these volumes labours, may be taken to account for the inclusion within them of a large number of ghostly stories, we cannot venture to decide. These may have interest for those readers whose taste inclines them that way. The book, however, is redeemed by several short but pithy essays, some of which touch lightly on medical matters. A chapter on "The Little Pill" affords a critical but withal kindly sketch of character as exhibited respectively in the general practitioner, the specialist, and the scientific physician. In a *morceau* headed "A Doctor's Warning" we meet with the following happily phrased passage:—"The family doctor has special opportunities of observing human nature and the complications which arise from the various relations into which people of opposite or harmonious temperaments are thrown. The comedy and tragedy of real life thus perpetually come before him. He may be said to have a duplicate key of the cupboard in which the family skeleton is kept, and, as skeletons are in his line, if he be an observant man of the world, he will not fail to be more or less interested in the way in which the bones are articulated and the whole fabric is hung together." The volume might well serve to beguile short intervals of leisure, which even in these days of high pressure sometimes come in the way of busy men.

The Common Sense of the Exact Sciences. By the late WILLIAM KINGDON CLIFFORD. London: Kegan Paul, Trench, and Co. 1885. (International Scientific Series.)—The preface must be read to get at any understanding of the object and scope of this work, as well as the vicissitudes, if we may so say, through which it has passed. The design which its lamented author had in view has been carried out as successfully as was practicable. It is a very able, clearly written little work, although we doubt whether anyone unacquainted with mathematical science could fully appreciate it.

THE LANCET.

LONDON: SATURDAY, OCTOBER 17, 1885.

THE agitation in favour of granting degrees to medical students in the London schools is again becoming prominent. In the vacation educational matters are at a standstill, but with the advent of the session we are again confronted with them in all their complexity. The attempt at solution of the problem cannot be delayed until the formation of a Teaching University, now in a chaotic condition, be complete. Nor is there any prospect of a settlement by a suitable reform in the University of London. The difficulty in dealing with the question is dependent not on modern methods of teaching and examination, but on the different history of the rise of the medical schools in the different parts of the kingdom. In Scotland, in the provinces generally, and at King's and University Colleges, the hospitals have been either brought into existence by the medical staff attached to the respective Colleges and Universities, or they have been absorbed by them. In our great London medical schools, in some provincial schools, and in Ireland, as a rule, the existence of a hospital with a suitable clinique has led to the formation of a medical school. In some cases, therefore, degrees in medicine and surgery have always been granted; in the other cases they have only recently been asked for. The University of London, as a mere State examining board, has had, so far as medicine and surgery are concerned, no real *raison d'être* as a metropolitan University. It has had no connexion with any hospital, and its examiners have had no metropolitan *locus standi*, but have been drawn from all quarters of the world. The idea, therefore, that it is in some peculiar relation to the London medical schools is obviously erroneous. The injustice to the London student is the greater from the unnecessarily high standard of the examination as a pass degree, and the avowed intention of the University authorities to studiously maintain this standard. Because, therefore, the institutions for the proper teaching of medicine and surgery have had a different origin in different parts of the kingdom, there can no longer—inasmuch as but little difference exists in the teaching in well-appointed schools and in the examinations of the English Colleges and the Scotch and provincial Universities—be any fair or justifiable reason for withholding a degree from those students who pass the Conjoint Board of the English Colleges. The insistence by the General Medical Council of proof on the part of a candidate of having passed in mechanics as a condition for registration will improve preliminary examinations, and if the Colleges included a fair knowledge of practical biology in the scientific examination, very little fault could then be found with their scheme. To-day (Friday) the Fellows of the Royal College of Physicians will discuss this question, and we hope that the stale cry of "academic culture" will not be raised to divert attention from the main issue. Everybody knows that since the requirement of the possession of a B.A. degree before entering on medical study has been done away with, the only trace of academic culture for the medical student at most Universities at present is the passing of a slight matriculation examination and the signature of the University professors to the degree certificate. The University is now merely a name to attract students and to confer degrees on them; the medical schools and colleges are the places where the scientific education is given, whilst it is in the clinical hospitals that the practical part of our profession must be learnt; and the closer connexion of one medical school or set of schools with a degree-granting body is no sufficient justification for excluding other students from a degree on practically similar conditions of study and examination.

AT the Copenhagen Congress, after the delivery of an address by Sir W. GULL upon the subject, a committee was formed for the purpose of promoting the collective investigation of disease on an international scale. Dr. ISAMBARD OWEN was elected secretary-general to the committee, whose labours are now so far advanced that the questions to be investigated will soon be laid before the profession in the several countries. It is proposed to make an inquiry into the etiology of rickets, acute rheumatism, chorea, cancer, and urinary calculus, and schedules have been drawn up on a sufficiently wide basis to enable every medical practitioner to record the results of his experience in a concise manner. Thus upon rickets, in addition to the geographical question which applies to all the subjects, special inquiry is made to test its supposed dependence upon—(1) inherited syphilis, (2) deficient lactation, (3) insufficient or improper feeding, and (4) early marriage on the part of the parents. Upon acute and subacute rheumatism the inquiry will be made into—(1) its reputed association with a particular physical type, (2) its hereditary nature, (3) its relationship to true gout and to nervous diseases. Upon chorea information is sought as to (1) the association which is considered to exist between chorea and acute rheumatism; (2) the association which has been said to exist between chorea and a particular physical type; (3) the influence of malnutrition, mental distress, and depressed health in inducing the disease. Upon cancer (used in the wide sense of "malignant disease") the questions embrace (1) the association which has been supposed to exist between the prevalence of cancer and certain habits of feeding; (2) the influence which anxiety, worry, and depressed health have been said to exert in producing cancer; (3) the degree of its heredity. The primary questions, to which the foregoing are supplementary, refer to the prevalence of the diseases in the locality where the practitioner resides, and the number of cases he has personally attended during the past three years. The members of the Committee responsible for the inquiry are Drs. BERNHARDT, BOUCHARD, BULL, DAVIS, D'ESPINE, EWALD, FAYRER, GULL, HUMPHRY, JACOBI, AXEL-KEY, KORANYI, LANGE, LÉPINE, GUTIÉRREZ-PONCE, PRIBRAM RANCHFUSS, RUNEBERG, SCHNITZLER, TIER, and ISAMBARD OWEN. The inquiry will be closed at the end of 1886, to enable reports to be prepared in time for presentation at the International Congress to be held at Washington in 1887. The undertaking is one of great magnitude, as returns will practically be invited from every medical practitioner in the world. Fortunately the questions are of the simplest and

plainest kind, and such that no practitioner can fail to answer with but the smallest sacrifice of time. The success of the undertaking and the value of its results will indeed depend upon the co-operation of the whole profession. The earnestness evinced by the promoters of this the first attempt to secure the international prosecution of medical inquiry deserves to be rewarded with success. Much of our present knowledge of the geographical distribution of disease is based upon "bills of mortality," and is consequently imperfect and insufficient. The sum of the experience of individual practitioners is needed to correct such fragmentary knowledge. So with regard to the broad facts of etiology. Our present knowledge is based upon isolated inquiries, many of them as profound as the individual observer could make them; but this knowledge must be small compared with the results of a general collective inquiry.

IT is now two years and a half since it was resolved by a majority of the House of Commons that the compulsory periodical examination of prostitutes in the districts subject to the Contagious Diseases Acts should be abolished. The result of that resolution carried with it much more than the mere discontinuance of these examinations. There being no longer any occasion for their services, the special metropolitan police stationed in all the subjected districts were withdrawn. Prostitutes, being no longer compelled to submit to the fortnightly examination, which had the effect of detecting disease in its early stages and ensuring the prompt removal to hospital of all found infected, continue to ply their calling until from physical suffering they can do so no longer. They are then on their own voluntary application examined, and being found to be diseased are admitted into the hospital. The only compulsory clause retained is that of detention until cured. With this exception, and also that there is sufficient hospital accommodation, the condition of the subjected districts is very much the same as it was before these Acts were passed, and as it is in those seaports and garrison towns to which the Acts have never been applied. The inhabitants of all those cities and towns which have had the full benefits of these Acts have now ample opportunities of contrasting the present with the past condition of their respective districts. Judging from the remarks made by the deputation which waited upon the late Home Secretary, there would appear to be an almost unanimous feeling that, for the sake of the miserable women who are now to be found in greatly increased numbers plying their trade of prostitution unchecked in all these places, the recall of the police and the restoration of the compulsory examinations are most urgently called for. The condition of these women is very sad, and will probably continue so unless efforts are promptly made, or until a sensational description of them, similar to that formerly published of the "wrens of the Curragh," stirs the public feeling to its very depths, and restores the Acts to their former position. These Acts are still termed by their opponents the State Regulation of Vice. To most medical practitioners, and to all persons endowed with fairly logical faculties, the case presents no difficulty. Unfortunately the very existence of these Acts will depend upon the decision of the members of the forthcoming House of Commons, which, like its predecessors, will contain a certain proportion of members who are not logical. There are others more open to reason, who oppose these Acts as tending to loosen that high moral tone which they would wish to see firmly upheld throughout the length and breadth of these kingdoms. For them, and for all who would wish to be furnished with arguments favouring the support of these Acts on moral grounds, we may now discuss this most difficult and delicate part of the subject. On the broad question as to whether prostitutes with venereal diseases should be treated and cured there is little difficulty, as even the strongest opponents of the Acts do not suggest that these women should be left uncured. They urge, however, that their cure should be effected by voluntary means and voluntary hospitals. Now on this point medical men may venture to speak with authority. Long before this subject was ever taken in hand by the ladies and gentlemen who have so energetically opposed these Acts five voluntary lock hospitals were in existence, and the work was carried on by their respective surgeons, aided by a very few benevolent individuals, amidst the greatest discouragement and under most disheartening circumstances. It was argued by many excellent persons that the tendency of lock hospitals was to encourage immorality, and it was this feeling which caused, first, the gradual reduction of the Government grant to the Dublin Lock Hospitals, and then its entire withdrawal thirty years ago. But the consequences which followed were so frightful, that, in spite of strenuous and influential opposition, the grant was restored, and has been continued ever since, greatly to the benefit of the many prostitutes in Dublin. Now it is impossible to take a prostitute off the streets and to treat her till cured in a hospital, whether voluntary or State-endowed, without placing her in a position to resume her vicious calling. Here is the whole difficulty. The object of the Act of 1864 was "the prevention of contagious diseases"; that of 1866, "the better prevention of contagious diseases at certain naval and military stations." The women at these stations who practised prostitution among the soldiers, sailors, and civilians, were found to be diseased to an extent and degree perfectly shocking to read of. As the voluntary lock hospitals and wards furnished only a fractional part of the beds required, it was absolutely necessary to build new hospitals, which the Government did. In all this there was nothing done which was not warranted by the dictates of the most ordinary humanity. After the women were discharged from the hospitals cured, they went different ways. Some returned home to their friends, their expenses being paid by the Government; while others entered "homes" or "refuges for fallen women." Some, however, returned to their former life; and here, it may be remarked, comes another difficult phase of the subject. If a woman chooses to be a prostitute, no law can prevent her; but this fact does not place her beyond the pale of humanity. Let us suppose the case of a prostitute who, while in a London thoroughfare for the purpose of her calling, and while returning home with a man whom she had solicited, was knocked down and run over by a passing cab. Would she be refused admission into any metropolitan hospital on the grounds that she was a woman of immoral character? On the contrary, we all know that she would be admitted and treated as tenderly as the most virtuous woman in the

hospital. And why? Because our hospitals are truly catholic institutions, dispensing their charity irrespective of creed, of nationality, of calling.

The objection that these Acts tend to encourage vice, by making it safe, is easily disposed of. The object of the Acts was, as we have seen, to *prevent* disease. It has never been expected that they would stamp it out; no system, however perfect, could effect this. By means of the Acts the women subjected to them could not pursue their calling while in a state of disease for any length of time, its detection being merely a question of about a fortnight. Hence the argument that they create a real or fancied immunity is wholly untrue. But the periodical examinations do much more than merely reveal disease or its absence. By their means every one of these women is removed from her evil surroundings and brought to the notice of the visiting surgeon, who will afford her every facility should she wish to leave her evil courses and return to a respectable life. If found to be diseased she is sent to hospital, where she is again brought under good influences—those of the lady superintendent and the chaplain. If she wishes to return to her friends or to enter a "home," she is enabled to do so free of any expense to herself; if, on the contrary, she prefers to return to a life of prostitution, she does so not in consequence but in spite of the Acts, which, as we have seen, gave her every moral and religious as well as physical aid. In all that is done by these greatly maligned Acts, their action towards these unfortunate women is not that of harshness on the one hand, nor any sanction of their evil life on the other. On the contrary, all such as are capable of reclamation are reclaimed; all who are diseased are cured, and prevented from roaming about the streets, to their own injury as well as to that of others. For those who persist in a life of prostitution care is taken that they shall at frequent intervals be brought within better influences, instead of being left, as formerly, unwatched and uncared for, and that the way for escape from so hateful a life shall be always open. Surely in all this there is nothing of which the supporters of these Acts need be ashamed. Their action and influence towards these unhappy women is not, as the opponents would have it, "Go, and sin again." On the contrary, it is that of a far higher example: "Go in peace, and sin no more."

THE address of the Bishop of LONDON at the opening of the newly-erected wing of the Temperance Hospital was a model address for the occasion. It was so chiefly because it was in itself temperate. The Bishop is understood to be a total abstainer, and his fine physique certainly is no discredit to the doctrine and practice of those whose only beverage is from the "clear stream." The chief evil that could be attributed to water as a beverage is a certain intemperance of argument in many of those who use it exclusively. But the address of the Bishop is strikingly free from this fault. It must be allowed, too, in fairness, that this intemperance of the temperate is much less frequent than it used to be, and that many abstainers practise their self-denying virtue with a quietness and unostentatiousness which greatly strengthen their example for good.

The Bishop did full justice to the medical profession when he said that they were quite open-minded on this question. It is true, as his lordship said, that many of the members of the profession are abstainers; but the converse is also true. There is a very considerable number of medical men who absolutely abstain from alcohol; and there is a still larger number, including the most eminent leaders of the profession, who take so little alcohol that they may be set down as practically taking none. There is, too, in the practice of the medical profession a very marked diminution of the prescription of alcohol. It is very seldom prescribed, and when it is prescribed it is in smaller quantities and in weaker forms than formerly. This change is very obvious in hospitals generally, as well as in private practice. One reason for this, in the case of hospitals, is in the almost entire abolition of suppuration which the use of the antiseptic system has brought about. The students who are beginning their education now can form no conception of the significance of this change, which can only be considered second in importance to the introduction of anæsthesia. They cannot realise the pints of pus—often stinking pus—that used to flow, sometimes for weeks, from compound fractures, from stumps, abscesses and wounds, twenty years since, at the expense of the patient's blood and to the great risk of his chief glands and of his vital powers. The process was accompanied with high temperatures, and was most debilitating. All this has been altered, to the infinite advantage of the patient. Thus, not only does antisepticism save limbs, but it saves power, and blood, and glands from destruction. This abolition of suppuration has enormously reduced the need for alcohol as an agent that the profession believes to be most useful in exhausted states. In the medical part of practice, too, improved means of dealing with febrile states, of reducing high temperatures, and averting the prostration which their continuance involves, have greatly lessened the need for large quantities of alcohol, while more careful clinical observation has enlarged our knowledge of the harm which it is capable of doing in the way of producing disease or disorder of function. We may freely admit, too, to such a fair and sound reasoner as the Bishop of LONDON, that physiology and common observation have been demonstrating for many years the dispensableness of alcohol for ordinary people, especially all young people, in ordinary health. The experiments of PARKES and others, showing the limited power of ordinary people to consume alcohol without its accumulating in the blood or passing out of the system unchanged, and the visible health and spirits of thousands of people amongst us who never taste it, and their good longevity, as shown by the experience of insurance offices, have been too strong to be overlooked by a profession so open-minded and so grave in its responsibilities as ours. On one special point, too, the opinion of the profession is unanimous—that not only must little alcohol be taken if health is to be maintained, but that that little must be diluted, and, above all, mixed with food. No sensible man now will throw raw spirits, or even wine and beer, into an empty stomach; certainly no medical man will advise him to do so. The little that is taken must be covered with food, if injurious irritation of the mucous membrane and gastric nerves and the neighbouring liver is not to ensue.

No one will deny that the Temperance Hospital has done good. No member of its medical staff is prevented from

prescribing alcohol where it is thought absolutely necessary. This has been done in one in a thousand cases, and the mortality has been only 5 per cent. It may be that the hospital, being still young and withholding alcohol, does not yet receive the full share of grave cases which the confidence of the poorer classes takes to other hospitals. But it is within our own knowledge that very grave cases are taken in and are very well treated when received, and this with results highly creditable to the hospital. We have only, in conclusion, to assure the Bishop and all who are nobly working for the wellbeing of the people that they never had more earnest co-operators in the medical profession than they have now.

IT has been fully recognised of late that albumen is often present in the urine of persons apparently healthy; indeed some writers, among whom may be mentioned SENATOR, claim that normal urine is always feebly albuminous. Without discussing the question whether albumen is a normal constituent of the urine, we readily admit that albuminuria, apart from renal disease, does occur in connexion with disturbances of digestion, of innervation, or altered conditions of the blood. Dr. PAVY has recently drawn attention, and in a paper which appears in THE LANCET of this week, to a form of albuminuria which has, he thinks, a cyclic character. In these cases, he remarks, the urine examined at one period of the twenty-four hours is found to contain a considerable amount of albumen, whilst at other periods there is none, or merely a trace; and, moreover, what is observed one day is repeated with more or less exactness the next. The period during which the albumen is usually noticed is in the forenoon—9 A.M., 10 A.M., 11 A.M., and so on—till a maximum is reached, when it declines, and by the evening has usually disappeared. Dr. PAVY points out that an analogous phenomenon may be observed with persons who pass phosphatic urine. The early morning urine is clear and bright, but that passed after breakfast during the forenoon becomes alkaline, turbid, and phosphatic. Owing to the regular and periodic recurrence of the albumen during the morning hours, Dr. PAVY has applied the term "cyclic" to this form of albuminuria. We cannot help thinking, however, that he has laid somewhat too much stress on the periodicity of the albuminuria in question, and the very instance of the "alkaline tide" which he mentions as occurring in the morning urine, and considers to be analogous, has been proved by several observers not to be cyclic at all, but that it can be induced at any period of the day by appropriate means; and it has also been shown to have no connexion at all with the phosphatic diathesis—that is to say, no increase of phosphatic salts is observed; they are simply deposited in the alkaline urine. So also as regards the so-called "cyclic albuminuria"—we think it can be shown that it does not depend on any special periodicity, but to general habit and circumstance. As Dr. PAVY observes, the urine passed on rising is usually free from albumen; it is the urine next passed that is albuminous. Now the early morning urine represents the secretion under the influence of rest, and the mere act of rising in persons who are in the habit of passing albumen under slight provocation seems in many instances sufficient to cause it. Thus, in the case of a young lady who was suffering from what was supposed to be "adolescent albuminuria," the urine passed shortly after rising was always highly albuminous: if she got up for breakfast the urine was albuminous in the forenoon; if she got up after lunch, in the afternoon; if after dinner, in the evening. Here the albuminuria could be made periodic by the habit of the day. In other cases the albuminuria seems sometimes attributable to cold—either to exposure whilst dressing, or to a cold bath, or even to washing the face and hands in cold water. The fact that neurotic albuminuria is observed clinically in some persons after a cold bath or exposure to cold has led some writers to suggest that the albuminuria thus induced is allied to paroxysmal hæmoglobinuria. Dr. PAVY'S cases are interesting as clinical records, but we hardly feel disposed to accept his explanation that physiological cyclic change sufficiently accounts for the albuminuric phenomenon.

Annotations.

"Ne quid nimis."

THE REFORM OF THE UNIVERSITY OF LONDON.

THIS movement has revived, and threatens to become more and more active from week to week. The Teaching University seems to be in abeyance and waiting on events. On the 3rd prox. an adjourned extraordinary meeting will be held at the University to continue the adjourned debate on Lord Justice Fry's motion that the report of the special committee be received and adopted. Although the opposition to the scheme of the special committee was very decided on the part of several members of Convocation, who thought that the powers of that body were being infringed by the promoters of the new scheme, a more mature consideration has apparently convinced them that a mere negative motion will be very undignified and embarrassing. Such reforms as a termination of life senatorships, a much diminished number of Crown nominees on the Senate, the institution of boards of studies, and a thorough reconsideration of the regulations relating to candidates for medical degrees, are inevitable; and agitation is sure to proceed and become more violent and obtrusive until these, at least, have been taken into consideration by the Senate and obtained by a new Charter. Probably a similarly oligarchical administration like that embodied in the University Senate can scarcely be found in any other important executive in the United Kingdom. The opponents of Lord Justice Fry's scheme have been invited by circular to meet on the 21st inst., at 4.30 P.M., at the room of the Society of Arts, John-street, Adelphi, so that their course of action may be then determined on. Another scheme has been put forward on the lines of the Corporation of the University of Oxford, and will be brought under the notice of the members of Convocation on Nov. 3rd, but it is doubtful if it can then be formally considered. The chief points of the new proposal are embodied in the following resolution:—

"That, in the opinion of Convocation, a scheme for the reform of the University should be framed with a view to the realisation of the following objects:—(1) An enlargement of the powers directly exercised by Convocation. (2) An increase in the proportion of senators to be nominated or elected by Convocation, and the limitation of the tenure of office in the case of all senators to a term of years. (3) The encouragement of mature study and original research among the members of the University by such methods as may be considered suitable and expedient, and especially by the establishment of University lectureships, of limited tenure, in different departments of learning and science. (4) The introduction into the constitution of the University of such modifications as may remove all reasonable ground of

complaint on the part of institutions in connexion with the University as to the absence of means for expressing opinion and giving advice to the Senate on the examination regulations, and the changes proposed to be made therein from time to time. And, further, that it is worthy of consideration whether the modifications suggested in the fourth proposition might not be best effected by the establishment of a congregation of the University of London, consisting of (*a*) the Senate, (*b*) members of Convocation, of such standing and other qualifications as may be determined on, (*c*) the examiners and other officers of the University, and (*d*) representatives of such institutions in London and the provinces as may be in connexion with the University."

NOTIFICATION OF INFECTIOUS DISEASES.

THE last ten numbers of *The Practitioner* have contained a series of articles on the working of the Acts relating to the Compulsory Notification of Infectious Diseases in England from the point of view of the medical officers of health concerned in their administration. The account given is almost exclusively based on the published reports of those officers, and, where it has been found possible, statistical tables have been prepared to show what influence, if any, the system has had upon the general death-rate and the death-rate from specially indicated diseases in the districts concerned. This month's number contains a summary of the whole. It explains the different methods for acquiring the needed powers as to notification; it states the recent action of Parliament as regards the diseases concerning which notification may be required; it enters into detail as to the attitude in the several districts of both the public generally and of the medical profession towards the compulsory clauses; and then it deals with a certain number of prominent questions concerning which views have been expressed in the reports of the officers of health. Those officers, as a body, evidently attach little value to such notification as is solely required of householders; and, in the present state of feeling on this point, it seems clear that the dual system of notification is the one which they would advocate. No evidence is forthcoming as to any noteworthy concealment of cases of infectious disease in order to avoid publicity; whereas, on the other hand, instances are given in which the people of their own accord have sought the intervention of the sanitary authorities and their officers to secure the needed measures of preventing the spread of infection. Indeed, one of the most striking points referred to in connexion with the advantages which are stated to have resulted from compulsory notification is the frequent testimony to the effect that the system has resulted in a general education of the public in some of the first principles of health, and that people hitherto most careless in the matter of infection, having constantly before them evidence of the importance which is attached to measures calculated to prevent the spread of disease, themselves come to be influenced in the same way, and gradually acquire a much keener sense of their own responsibilities in the matter than had seemed possible. The statistical evidence as to the value of the Acts is, at first sight, disappointing; and this especially as to the reduction of mortality from scarlet fever, a disease against which no other means of prevention seem available except such early isolation and disinfection as notification would have appeared to favour, if not to secure. But, in many of the districts dealt with, it is evident that the period which has elapsed since notification came into operation has not sufficed for the eradication of a poison which has become deeply rooted in our large centres of population, or to secure such hospital accommodation as should have sufficed to remove a somewhat general feeling against that immediate isolation which alone can avail to prevent this disease from spreading. In some districts where authorities profess, by their adoption of the compulsory notification system, a desire to have early knowledge of cases of spreading disease, they have failed to make the most common provision for dealing with it, and they either have no hospitals to which to remove patients, or the accommodation they have provided is of such a character as to deter people from availing themselves of it. Obviously the needed means of prevention should always be adopted in advance when authorities seek these compulsory powers. The article we refer to is, as already explained, based upon the reports of medical officers of health. As such it is very instructive; and though these officers, as regards some important points involved, constitute only a minority of the profession which is so especially interested in the question, yet they are an important body, and it is well to have on record, in the form in which it is now placed, the views of those who in their administrative capacity can speak with authority on many of the questions relating to a system the extension of which, to the kingdom generally, may turn out to be one of the most important of our future advances in sanitary legislation.

THE BRITISH PHARMACOPŒIA.

IT is evident from the correspondence we have published in our columns that the reissue of the British Pharmacopœia has some very serious defects. The official authority by which the volume is published ensures it the most conspicuous position, and should have placed beyond question the reliability of its details. The volume has been edited by the three well-known experts—Professor Redwood, of the highest repute as a pharmaceutical chemist; Professor Bentley, of not less high repute as a pharmaceutical botanist; and Professor Attfield, as a scientific pharmacist. In addition to these, a specially constituted committee consisting of members of the General Medical Council, with Dr. Richard Quain as their chairman, was appointed for the "general supervision of the preparation of the work." It would be unreasonable to expect that the three experts should have a knowledge of the requirements of medical men; but it is not unreasonable to assume that Dr. Quain and his committee were specially charged in their capacity of supervisors, to adapt the British Pharmacopœia to the requirements of the profession of which they are members. Primarily, the responsibility of the defects set forth by the various correspondents in our columns, and by many others which space does not permit us to give as fully as they deserve, must rest with the General Supervision Committee and their chairman, Dr. Quain. It is not too much to say that, in face of the very many and grave defects, an amended edition should be issued, which would have due regard to the requirements of the prescriber, the convenience of the compounders, and the security of patients. A high pharmaceutical model appears to have been aimed at in this work, with a singularly unfortunate failure in making the volume a workable guide either to the pharmaceutical chemist or medical practitioner. We very much question the wisdom of the absence of detailed processes for making some of the more important medicinal agents. Complex processes are left to the judgment of the manufacturing chemist, and the resulting products may be expected to vary considerably. It is well known that one house has the reputation for excellence in some particular preparation, and another for other specialities; so there must be considerable variability in the quality of medicines, notwithstanding the elaborate and specific methods in the Pharmacopœia for testing their purity and quality. These, indeed, are as a rule too elaborate for practical daily utility; and we venture to predict that they will be very much disregarded in the business of pharmacy, though no doubt they may be valuable test guides in the scientific laboratory.

RECENT DIARRHŒAL MORTALITY IN THE LARGE ENGLISH TOWNS.

THE annual mortality from diarrhœa during the thirteen weeks of the summer quarter of this year was equal to 2·0 per 1000 of the estimated population of the twenty-eight large English towns dealt with in the Registrar-General's weekly return. The mean death-rate from this cause in these towns in the preceding five summer quarters was 3·0, the rates in the several years ranging from 4·5 in 1880 to 2·1 in 1883. The diarrhœa rate last quarter was therefore slightly lower than that recorded in the corresponding period of any of the preceding five years. This was, doubtlessly, due in great measure to the comparatively low temperature that prevailed during the greater part of August and September; the mean temperature being below the average on fifty-two of the sixty-one days of those two months. The greatest mortality from diarrhœa last quarter occurred in the first week of August, after which the mortality from this cause steadily declined. Although the varying meteorological conditions, especially of temperature and rainfall, place great difficulties in the way of a satisfactory comparison of the death-rates from diarrhœa in different seasons, similar difficulties do not stand in the way of comparing the rates from this cause in different towns in the same season. During last quarter the diarrhœa death-rate was equal to 2·0 per 1000 both in London and in the aggregate of the twenty-seven provincial towns. When, however, a comparison is made between the rates recorded in these twenty-seven towns, the same marked contrasts are observed, which have rendered the causation of this summer infant mortality one of the most interesting problems connected with public health. In these provincial towns the rate from diarrhœa last quarter ranged from 0·5 in Huddersfield and 0·6 in Oldham and Halifax, to 2·6 in Portsmouth, 3·8 in Salford, 4·8 in Leicester, and 6·0 in Preston. These diarrhœa death-rates are to some extent affected by the proportion of infants in the population, but the constancy of the excess of mortality from this cause in the same towns points undoubtedly to intimate connexion with sanitary condition, using this term in its larger signification as a synonym of health condition. Infant mortality from all causes, measured by the proportion of deaths under one year to registered births, averaged 185 per 1000 in the twenty-eight towns last quarter, and ranged upwards to 260 in Salford, 279 in Preston, and 307 in Leicester.

CARDIOGRAPHY.

WHETHER cardiography is ever destined to take a place in the routine of clinical practice is a question which cannot now be answered. The sphygmograph would have been ere now in every practitioner's greatcoat pocket were its indications of more certain value than an experienced finger. It will not be for want of systematic attempts if cardio-sphygmography does not some day take its place amongst the clinical physician's armamentaria. The most recent contribution to scientific cardiography comes from America in the form of a pamphlet by Dr. A. T. Keyt of Cincinnati, Ohio. The author says: "The cardiogram is a precious document. It is the record of the heart's pulsation written by the heart itself. Every phase of this record answers to a corresponding phase of the cardiac cycle, and the interpretation is now well understood. The line between the bottom of the main ascent and the top of the main descent answers to the ventricular systole, and the line between the top of the main descent and the bottom of the next main ascent answers to the ventricular diastole; and the small wave, single or double, which immediately precedes the main ascent answers to the auricular systole." The factors that determine the tracing are: (1) Changes of contraction and of relaxation of the cardiac fibres, (2) changes of intra-cardiac pressure, (3) changes of consistence of the cardiac walls, (4) changes in the volume of the heart, (5) reciprocal influences between the open ventricle and artery and open auricle and ventricle. The facts that cardiography has brought to light are arranged under three headings. First, those relating to the duration of cardiac cycles. The duration of single cardiac cycles can only be determined by measurement of the cardiagrams. The rhythm of the heart may appear to our senses to be perfectly regular, and yet the variation in the length of the cycles may be considerable. The cycles of the heart are shorter in inspiration and longer in expiration; the shortening runs over into the first part of expiration, and the lengthening into the first part of inspiration. Secondly, facts relating to the duration of the ventricular systole and diastole. By means of cardiography these durations can be determined with the greatest facility and accuracy. With a pulse-rate of 75 the average duration of systole is about ·326 of a second, and of diastole about ·474. Systole and diastole may both vary their duration without the length of the cardiac cycle being changed, in which case the shortening of the one will exactly equal the lengthening of the other. Thirdly, facts relating to the auricle. Although the theory that auricular contraction occurs in the latter part of the period of ventricular relaxation was accepted, it remained for cardiography to prove the point incontestably. Experiments on men and animals have shown that the systole of the auricle precedes the ventricular systole by an interval which averages about one-fifth of the duration of the cardiac cycle, the proportion, however, being less in long and greater in short cycles.

THE SANITARY STATE OF NEWHAVEN.

THE confidence which the inhabitants of England and Wales have been putting in the energetic action which it was hoped was being displayed along our coast line, and especially at such ports as are in frequent communication with Spain and France, will have been rudely shaken by the revelations made by Lord Sheffield as to the sanitary state of Newhaven. Lord Sheffield gives a detailed account of the recent sanitary history of the place, and this includes the story of remonstrances on the part of the Local Government Board; of refusals by the sanitary authority to fulfil the requirements of the central authority; of reports by the local surveyor and by a skilled engineer, all showing a disgraceful condition of the town as regards its sewerage; and lastly, bringing affairs down to a recent date, the report of Mr. Spear, one of the inspectors of the Local Government Board is quoted, to the effect that, together with drains which are little better than elongated cesspools, the house connexions are faultily constructed, badly flushed, and ill-ventilated; and apart from this, it would appear that nuisances in the shape of cesspools, refuse accumulations, and sewage outfalls are such as to have led to loud local complaint. Lord Sheffield then goes on to show that the annual average mortality of the place is some 6 or 7 per 1000 more than that of larger towns along the same coast, and that the excess is to a serious extent made up of deaths amongst children, whose lives, as is well known, are so extremely sensitive to such defective sanitary conditions as have been described. It is true that the zymotic mortality has not been excessive, but many a place in a similarly neglected state has suffered a like immunity for a series of years, until at last the day of reckoning has come. Lord Sheffield calls upon the Local Government Board to step in and compel the defaulting authority to do their duty, not only for the sake of the inhabitants of the place itself, but because during such seasons of special danger as we have passed through for the last two years, and may have again

to pass through next year, such places as Newhaven constitute a source of danger to the country at large. We endorse the request thus made. But in these days, when on all hands an increase of local self-government is so much in demand, we would at least point out that the inhabitants of Newhaven, who have already appealed to the Local Government Board for help in the matter, have full power themselves to elect a board which will do its duty as regards the provision of a proper system of sewerage, and that such local action would be by far the most satisfactory solution of the difficulty. There are districts where the inhabitants are all but helpless, owing to the influence which some few determined opponents of sanitation are able to exercise, and for this reason it is necessary that a central authority should have the power of stepping in and enforcing compliance with its orders. But we should hardly have thought that Newhaven was such a locality, and it may be that the publicity now given to the disgraceful state of the town may act as the needed stimulus to the authority. If not, it must be remembered that the whole country has a direct interest in seeing that the laws relating to public health are not so ignored at its ports as appears to be the case at Newhaven, and this interest will of itself form the justification for the issue of a compulsory order from the department of the Government in which this power of intervention has been vested by the Legislature.

SELF-INHUMATION.

It was known long before the forty days' fast endured by Dr. Tanner that human beings could exist for a period of two or three weeks, and perhaps longer, without food, so long as water was allowed and the surrounding atmosphere was wholesome. It is possible that even that remarkable fast may have been equalled by others in recent times. The race of fasting women is not yet extinct. These persons, though deceivers, inasmuch as they professed to subsist in the entire absence of food for months together, may originally have possessed unusual powers of abstention. The power which the nervous system exercises over nutritive processes is generally recognised. To stimulate it will encourage digestion and the further metamorphosis of food within the body. To depress its activity by drugs, or to allow it to lapse by want of due bodily exercise, will, conversely, result in the greater or less suspension of its influence on tissue changes. In this way we can best explain the close relationship which is frequently observed—especially in females, whose nervous organisation is more sensitive than that of men—between a listless habit of mind and body and an unnatural carelessness as to food and drink, and this without further deterioration of such health as they can be said to possess. A little deeper depression, and they would pass into a state of trance, as they occasionally do, and spend, it may be, days in a kind of hibernation, the income and expenditure of their tissues remaining for the time in practical equilibrium. It is only to be expected that among the natives of warm climates, whose type is largely neurotic, cases of this kind should appear from time to time. We may probably in this way best explain the less fabulous histories of suspended and recovered animation which are reported by the older writers on Oriental life and customs. When we come to self-inhumation, however, belief becomes more difficult. One may do without food and water for some days, pure air being supplied him; but it is not, in our opinion, possible that he can subsist for so long a period, be his condition what it may, when deprived by burial of the latter necessary means of sustaining life. When we hear of a fakir buried for forty days, his grave guarded, and corn sown and grown over him during his subterranean sojourn, then of his being dug up and quickly revived by hot bathing, we feel convinced that the testimony of unsuspecting European sahibs to this effect has been created by mollahs or other holy men of miraculous untruthfulness. It is significant that the later narratives record a diminishing degree of success in the result of inhumation. The unfortunate subject did not always survive to receive the worship and other attentions which were due to one who had passed the ordeal. There is mention also of a hollow bamboo which was used to furnish air to a poor old man while underground. Unhappily, he was one of those whom death did not suffer to discredit and enjoy the thoughtful kindness of his friends.

HÆMATEMESIS NEONATORUM.

THIS hybrid term may be allowed to describe a symptom which sets in soon after the birth of a child, and not unfrequently leads to its death. The specimen which Dr. Sawtell showed at the Clinical Society last week was an excellent example of multiple ulceration of the mucous membrane of the stomach of the newly born. That the fatal hæmatemesis was due to these ulcers no one could doubt; but in many cases of the sort no ulceration can be detected; and indeed, according to many authors, such ulcerations are certainly rare. But one of the most recent works on children's diseases—Dr. Goodhart's—states that gastric ulcers are not very uncommon in the newly born, and ought to be attributed in some way to the disturbance of balance in the circulatory system which supervenes on the separation of the infant from the placenta. Dr. Radcliffe Crocker made a happy suggestion in attributing such ulcerations to a "purpura" of the gastric mucous membrane, and akin in nature to the less dangerous purpura neonatorum.

MILK FOR THE POOR.

THERE is room for the exercise of philanthropy in procuring and distributing milk to the poor of our large cities. It is beyond doubt that young children who have an abundant supply of milk grow in size and improve in strength more than on any other single article of diet. The exhibition of dairy stock and improved dairy utensils at the Agricultural Hall has created additional interest in this particular and important branch of agriculture. There is no difficulty in producing an abundance of milk, which can be supplied at fair profit to the producer at twopence per quart; but the cost of distribution is now so excessive that the prime cost of milk is more than doubled before it reaches the consumer. We have Sir James Caird's assurance that for "£100 received for milk in London the producer receives but £40, while the distributors receive £60. Evidently some organisation is necessary to lessen this cost of distribution, if the full benefit from a larger consumption of milk is to be achieved and a sufficient milk-supply for the people assured. In England there is but one cow for every fifteen of the population. It would be an advantage to treble this number, with a view to ensure not only a larger milk-supply, but an increased quantity also of fresh butter and cheese. Many acres of land are going out of arable cultivation in England, nor does there appear much prospect of this land being brought again under cultivation for cereals. It will therefore lapse into grazing land, or be laid down for permanent pasture. Milch cows, with a little artificial feeding, appear to yield the only source of profit from such land. In Lincolnshire the cottagers often hold, according to Lord Carrington, some six acres of grass land on which to keep a cow. Such a system largely extended over England would add to the milk-supply; but the difficulty of collection and distribution necessitates some better organisation than exists at present. There are many well-disposed and charitable persons seeking an opportunity to help the poor. The collection and distribution of milk to the poor of our cities, towns, and villages, at the least

possible cost, would open up a sphere for energy, and at the same time afford some promise of relief to the depressed condition of agriculture, whilst it would be a boon to many an ill-nourished and impoverished constitution now deprived of this valuable article of diet.

NEW FACTS CONCERNING THE VENOUS CIRCULATION IN THE FINGERS.

THE separate injection of minute venous radicles is a matter of difficulty owing to the resistance offered by the valves. M. Bouceret adopts the following method. The part to be injected is kept in a warm bath, 104° to 113° F., for five or six hours. The arteries are then injected with a colourless fluid; as soon as the subcutaneous veins appear to be well defined, but before they are distended, the injection is stopped. A cannula is inserted by means of a trocar into the largest of the superficial veins. A simultaneous injection is next made of the artery with red fluid, and of the vein with blue fluid. Each fluid penetrates to the capillaries, and the colour of the part is pretty much that which is seen in life. It is supposed that the colourless fluid either makes the valves of the veins incompetent by distension, or else that it actually forces the valves against the sides of the vessels. This method has brought to light what appears to be a discovery, which is no less than the existence of a special collateral circulation in the fingers perfectly distinct from that which nourishes the tissues. The branches which are given off from the collateral arteries are very few and thin, so that the trunk vessels are hardly reduced in size where they terminate in an arch at about the middle of the palmar aspect of the last phalanx. From the arch many arterial tufts are given off and divide in the pulp of the finger. These vessels have no venæ comites. Practically the tufts are like the glomeruli of the kidney. They are found in abundance about the arch before mentioned and under the upper two-thirds of the nail, as well as over the thenar and hypothenar eminences. The ordinary mode of vascularisation is found side by side with this special form. The large size of the digital vessels at their termination is in great contrast with the comparatively slight nutritive wants of these parts, and M. Bouceret believes that the object of the special kind of circulation is to afford more nourishment and warmth; but there seems more probability in M. Poirer's suggestion, that it is related to the exquisite sensibility of the localities concerned.

A HARD OR AN EARLY WINTER: WHICH?

PREDICTIONS of "a hard winter" are so frequent at this time of the year, and are so often falsified, that the forecast has come to be classed as a variety of the cry of "Wolf." It is, in fact, generally disregarded. At the present moment the signs of weather of unusual severity are very numerous, and appear to be especially distinct and trustworthy. There is, however, a consideration which we would suggest to the students and seers of meteorology that may be worth entertaining. When great and rapid changes of temperature and exceptionally severe weather are experienced in October, is it not more reasonable to suppose that there will be an early winter than a hard one? As a matter of fact, the observations of the last twenty years would warrant the conclusion that this is so. We have had our winters broken, as it were, into fragments, and distributed over the autumn and spring, rather than confined to the period from November to March, which used to be looked upon as "the winter" proper. The notification that hills and mountains in Wales and some parts of Scotland are already covered with snow may, if this view of the matter be correct, be regarded as a presage of a distributed winter for 1885-86, as in recent years, with intervals of mild and what must be called "unseasonable" weather, if we cling to the old-fashioned notion that winter ought to consist of a long stretch of cold connecting successive years. The advantage of taking a practical view of the probabilities will be that, instead of putting off the precautions we are wont to take against the "chills" of winter until a definite season of cold sets in, these precautions will be taken at once, and the next seven months, at least, will be treated as a period during the whole of which it will be not only prudent but indispensable to observe such rules of carefulness as a due regard for health, without fussiness, may suggest.

MALFORMATION OF KNEE IN A RECRUIT.

DR. P. S. NOVITSKI of the Military Hospital, Kasan, communicates to the *Vrach* an account of congenital malformation of the right knee existing in a recruit who was sent into hospital for examination as to his fitness for military service. He complained of weakness of the right leg, especially on flexion, which condition had existed from childhood, but had not increased. When standing upright, the circumference of the right thigh was evidently less than that of the left; the difference was found to amount to two inches, the right calf was also half an inch smaller than the left; the feet and buttocks were equal. The right internal vastus could not be felt, but in its place was a soft substance like an empty sac. When the right leg was extended, the patella was in its ordinary position; but from the weakness of the extensors it was capable of lateral displacement. When displaced inwards, the anterior prominence of the external condyle could not be felt, but in its place there was an inclined plane sloping outwards. The movements of the joints of the right leg were normal in extent, but when the man was lying on his back, and directed to flex and extend the knees, the right leg, though flexed with facility, was only extended with some exertion, and in a jerky manner. During the flexion of the knee the patella moved gradually outwards, upon the anterior surface of the external condyle. When flexion was complete, the tendon of the rectus was plainly seen, and the muscular part of the internal vastus lay in front of the external condyle as a thin muscular film. The patellar ligament was also to be made out lying on the external condyle of the tibia, so that the whole of the structures forming the anterior boundary of the knee-joint were displaced outwards. On complete flexion, the intercondylar groove could be felt covered with cartilage above only. On gradual extension of the limb the patella returned to its usual position without any crepitus, showing that the path over which it travelled was smooth and lubricated by the synovial fluid.

ARCADES AND COVERED WAYS.

WITHOUT either forgetting or losing sight of the reasons, more or less cogent, which were assigned for the destruction of the arcaded footways in Regent-street, it is permissible to regret that London has so few places where it is possible to walk and "shop" in wet weather. Probably few, if any, other large cities are so badly supplied with sheltered resorts for that large and not unimportant class of the population which desires to walk out and transact its business with the retail shopkeepers. Would it not be possible, while the long list of incomplete plans for "improvements" is still under consideration, to ascertain whether or not a genuine public need, without serious drawback or inconvenience, could be supplied? It seems strange that the recognition of this requirement and the promise of a way to meet it have not long since been accomplished facts. Regent-street would certainly have ap-

peared a very suitable thoroughfare for covered footways, but those who are old enough will remember the clamour which culminated in the removal of the sheltering roof. It may be that had the agitation been postponed until 1851, after the Great Exhibition buildings had shown what could be done with light iron pillars and glass, the arcades would not have been wholly destroyed, but reconstructed so that the shops might be better lighted by day and no objectionable obscurity created at night. Might not the footpaths of Regent-street, or of other busy streets of London, be protected by a glass roofing supported with slender ironwork, so that there might be some resort for those who are now kept within doors by the weather? Surely the retail trade of such a place would be prosperous, and the general effect not objectionable from an architectural point of view.

DR. TOMMASI-CRUDELI ON THE CLIMATE OF ROME.

IN the spring of the present year this accomplished pathologist and physician delivered a series of lectures, about fifteen in number, on the Climate of Rome—a subject on which (leaving out of consideration the scanty references in Vitruvius and Celsus) there was no systematic treatise before that of Alessandro Petronio of Cività Castellana, whose five books, "Del Viver delli Romani et di Conservar la Sanità," appeared (in their Italian form) at Rome in 1592. This quaint volume, which has much interest for the historian of medicine, had no very remarkable successor till, early in the eighteenth century, John Maria Lancisi, the celebrated body-physician to Pope Clement XI., published his elaborate works on the causes of malaria and on the meteorology of Rome and the surrounding Campagna. His views continued to dominate the medical world not in Italy only but in Europe, giving permanence and currency to what Dr. Tommasi-Crudeli aptly calls the "palustral prejudice," and inducing among physicians in general, and hygienists in particular, a belief in the maintenance and extension of forests as a means of checking and finally eradicating malaria. A distinct and important modification of the marsh-theory was first made in 1870 by Professor Léon Colin of Paris, who, at the instance of the Emperor Napoleon, subjected the soil of the Campagna to a thorough examination, and found the cause of malaria in a telluric poison (*intoxication tellurique*) due to the Campagna vegetative energy being greatly in excess of the pabulum supplied to it by the scanty sprinkling of herbage on its surface. Restore the cultivation it enjoyed under the Antonines, utilise the vegetative power with which this volcanic earth is literally bursting for the growth and rotation of crops, and, says Dr. Léon Colin in effect, you will find malaria disappear as the soil-gases get absorbed by their appropriate pabulum. This doctrine, worked out with great ingenuity and inductive power, never received, except in these columns, the consideration it deserved—Dr. Léon Colin's volume having been published just at the outbreak of the Franco-German War, and its circulation consequently arrested. Meanwhile Drs. Tommasi-Crudeli and Klebs had been prosecuting their researches into the non-gaseous origin of malaria, which they thought they had found in a "fermentative organism," the so-called "bacillus malariæ," a full description of which they published in their well-known monograph in 1879. Chiefly single-handed, Dr. Tommasi-Crudeli has since elaborated his theory from time to time, and the lectures he delivered in Rome last spring on the climate and hygienic conditions of the city and province embodied the latest touches he has given to it, with replies to the various criticisms it has evoked. These lectures, we are happy to announce, are shortly to appear in a revised form under the immediate care of the author, and will be read with interest, and, we doubt not, with profit by a far wider circle than that to which they were originally addressed.

WORKSHOP INSPECTION.

THOSE who are interested in the administration of the Factories and Workshops Act will have learnt something from an article lately published in the *Charity Organisation Review*. The writer, Jeannette G. Wilkinson, speaks from experience on the need of inspection in many workshops and of the difficulties by which it is beset. It is needless to go over the various insanitary conditions which have often to be remedied. These are known to be widely prevalent. A point of more interest is the apparently systematic evasion of the law by many employers, both with respect to over-crowding and excess of working time. The detection of such offences, owing to the paucity of inspectors employed, is no easy matter, and much must consequently depend upon such information as can be obtained from the workpeople themselves. Here another difficulty presents itself. Fear of dismissal, and ignorance of what really constitutes an indictable nuisance, or by whom it should be remedied, restrain many of this class from acting in their own interest. The needy poverty of others inclines them to exhaust themselves by working overtime rather than lose favour with exacting masters. It is satisfactory to learn, nevertheless, that inspection, though not yet efficient, is believed in by the *employés* as a body, at least so far as the observation of the writer in question goes. Among the class for whom she speaks—working women—no considerations of a supposed loss of personal independence prevent the extension of a state of opinion generally favourable to the Act. We should marvel if it were otherwise. With regard to the measure, the most necessary aids to its execution seem to be an increase in the present staff of inspectors, and the establishment of methods which shall bring the latter into closer intercourse with the workers. We are pleased to notice a proposal that a certain number of the inspectors should be women. In these provisions nothing is added which need excite the hostility of employers, and nothing proposed which is more than needful for the wellbeing of their assistants.

HYPODERMOCLYSIS FOR CHOLERA.

IN the articles which we recently devoted[1] to a succinct recital of Professor Arnaldo Cantani's treatment of cholera, we omitted the technical instructions for the copious subcutaneous injections. The description given in the original article in *Il Morgagni* left some uncertainty which it was thought best to clear up in correspondence with the Professor. He has courteously furnished the needed information under date Naples, 3rd inst. The best instrument for performing hypodermoclysis is made after Professor Cantani's directions by Scarpitti and Barbero of Naples, and Löwenstein of Berlin. It consists of a double cylindrical receptacle, the inner one of which is capable of containing the liquid to be injected, to the amount of two litres. The outer one, of the capacity of two to three litres, is covered with a woollen cloth, and is filled with warm water, so as to preserve the temperature of the liquid for injection. To the bottom of the inner vessel are attached two indiarubber tubes, about two metres long, furnished with stopcocks immediately under the recipient. Each tube terminates in another cannula, also having a stopcock, which fits into the cannula of the trocar with which the skin is perforated. The centre vessel has an aperture at the bottom, with stopcock, for the purpose of letting off the water when not in

[1] See THE LANCET, Sept. 26th and Oct. 3rd.

use. Professor Cantani specially directs that the trocars and cannulæ be disinfected before use with carbolic acid, or by preference in the flame of a spirit lamp. The weight of the liquid is sufficient to ensure dispersion under the skin, but the stopcocks are closed when the lump under the skin, from accumulation of liquid, has attained a certain bulk. If the absorption be not as rapid as it usually is, it may be accelerated by slight friction and pressure over the seat of injection. It is usually practised bilaterally on the sides of the abdomen or the intercostal regions. According to circumstances the injection is repeated twice, thrice, or four times daily. The usual quantity is one litre at a time, sometimes more, even to as much as two litres. Only once did the quantity of the warm saline solution injected under the skin amount to three and a half litres (nearly seven pints.) In consequence of the density of the blood the absorption was always very rapid, except when the patient was so nearly moribund that the circulation was very slow.

THE RATIONALE OF THE SMOKE-FOG NUISANCE.

THE behaviour of smoke, generally, may be studied by an interesting experiment, easily performed by any smoker of tobacco over his evening cigar or pipe. If he will blow the smoke gently from his mouth into any tall glass or vessel—even a tumbler will do—he will find that he can fill it by degrees as with a dense fog, and in a still atmosphere he may pour the fog from one glass to another without dissipating much of it. Precisely what happens with the tobacco takes place when we have a fog—that is, a cloud of vapour resting on the earth, the bulk of the fog being smoke. There are other fogs than those made of smoke, but it is easy by a series of simple experiments to convince oneself that smoke, whether of coal, tobacco—the lighter probably,—or any other vapour, may be concentrated by falling and drifting until it becomes a "fog" of considerable density, which may be rolled as a cloud along the surface of the water, or passed from place to place almost as a fluid.

FOREIGN PROFESSORIAL CHANGES.

DR. E. WOLFRING, extraordinary professor, has been appointed Professor of Ophthalmic Surgery in the University of Warsaw. Dr. Pavlovski has been appointed to lecture on Pathological Anatomy in the Military Medical Academy of St. Petersburg in succession to Professor Ivanovski, resigned. Professor Subbotin has resigned his post of chief physician of the Kharkoff charitable institutions. The local authorities have decided that his successor is to reside in the hospital, and is not to take private practice. The salary is £170, with lodging coal, and lights.

PHYSIOLOGY OF THE VAGUS.

UNDER normal conditions stimulation of the peripheral end of the divided vagus causes slowing of the heart's action. If this experiment be made on rabbits which have been exposed to cold, no effect is produced. M. Gley asks whether this difference is to be attributed to diminution of the excitability of the vagus, the result of the action of cold, or whether the cold acts directly in slowing the heart's rhythm. The first view is not thought to be the correct one, because stimulation of the central end of the divided vagus still shows its characteristic effects on the respiration. The explanation that M. Gley adopts is this: Cold itself slows the heart, and stimulation of the peripheral end of the divided vagus is unable to produce a greater slowing; if the animal be warmed, the heart quickens its rhythm, and then the stimulation is effective in lessening the cardiac rate. In other words, cold has a more powerful action on the heart than peripheric stimulation of the vagus.

THE INTERNATIONAL MEDICAL CONGRESS.

IN spite of further resignations which we announced last week, we still find it impossible to believe in such a catastrophe as the miscarriage of the plans for holding the International Congress of 1887 in Washington. Two years is a long time, and more than enough to make clear to everyone concerned what an injury would be done to the fair name of the profession in the United States by such a failure. It is very doubtful if any organisation exists which is competent to change the place of meeting of the Congress, or if any body that might think itself competent would venture on an act which would be regarded as one of doubtful courtesy towards the profession in the States. Be this as it may, we trust to the good feeling of our American brethren to put forth every effort to remove every obstacle to the visit which the profession in Europe has been putting down in its diary as a thing to be done in 1887. A new executive has been appointed, to whom the management of the Congress has been entirely transferred. This committee will have all the powers which the original committee thought it had, but which the American Medical Association decided were not entrusted to it. The executive will be completely independent of both the Committee of Arrangements and of the American Medical Association. The Association should not be too harshly judged in this matter. It is quite true that it represents a comparatively small part of the medical profession of the States, but it is the largest professional organisation, we presume, in the States. And the invitation conveyed to the Congress, which the Congress accepted, was an invitation conveyed by a committee appointed for the purpose by the American Medical Association. It is only fair, too, to admit that in regard to the United States the action of an Association is much more important than in older countries. The profession there is less perfectly organised and more heterogeneous, and a little more apt to run into irregularities. We think the Association is doing well in making itself less and less, that the profession may be more and more; and we sincerely trust that all members of the profession will put the best construction on its action, and remember that, but for it, the Congress might never have had an invitation to the States at all.

LABYRINTHINE DISEASE.

IT will be readily conceded that our knowledge of alterations of the labyrinth is defective. Politzer asserts that primary disease of the labyrinth is rare, whilst inflammations propagated from other parts are common. Moos has described a purulent infiltration of this region in variola, scarlatina, and typhus. Politzer relates the history of a patient who died from leukæmia, and in whom deafness supervened rather suddenly. The diagnosis of a leukæmic affection of the labyrinth was made during life. The tympanic end of the spiral chamber was filled with a cellular proliferation traversed by an osseous skeleton adherent to the wall of the labyrinth. In the vestibule a large agglomeration of white globules pressed against one another was discovered, and these were also found in the semicircular canals. Politzer asserts that such cases have not been described in leucocythæmia. Gottstein has recorded two cases of sudden deafness in leukæmia. Voltolini has written of acute "labyrinthitis"; in this disease the patient is violently attacked with symptoms having the intensity of acute meningitis. Politzer does not regard labyrinthine deafness as always incurable, and he cites observations of spontaneous cure of typhoid and syphilitic cases. Encouraged by the success that Weber, Fechs, and De Hoch have had, he has employed subcutaneous injections of pilocarpine in the syphilitic form of the affection. Atropine is also injected simultaneously to assuage the salivation, sweating, nausea, and vertigo, that are induced

by the pilocarpine. Marked success has attended the treatment, which is, however, valueless for affections due to hereditary syphilis, as also for the deafness of cerebro-spinal meningitis, and dry catarrh of the middle ear complicated with labyrinthine mischief.

UNHEALTHY DWELLINGS.

IN a paper on "Some of the Causes of Unhealthy Dwellings in Towns" which Mr. George Mackay, the sanitary inspector of Greenock, recently read before the Sanitary Association of Scotland, attention is directed to the need for better control of houses originally constructed to provide accommodation for one family, but which come in course of time to be occupied by many. Very considerable powers are given to local authorities in England and Wales by the Public Health Act of 1875 to enable them to enforce sufficient privy accommodation and water-supply to ensure a proper state of cleanliness. Nevertheless, as Mr. Mackay points out, house-owners are not prevented from altering already existing houses in a way which is more beneficial to their own pockets than to the health of the inmates, and he is of opinion that no alteration should be made without permission from the local authority. It is obvious that the future use of a house cannot be controlled, and that people who can only afford to occupy a portion cannot expect to find accommodation especially provided for their wants. But it would certainly be profitable to the landlord as well as to the tenant if greater effort were made than hitherto to provide for this class, many of whom must live on every estate. In all parts of our large towns the changes of fashion have led to certain streets or areas becoming occupied by those who must live in tenements, and health officers have too common experience of the dangers which result when such a dwelling, with the internal and often badly ventilated staircase, is invaded by scarlet fever. The proper isolation of the affected becomes practically an impossibility, and, unless opportunity is taken for removal to the fever hospital, the disease will rapidly spread through the house. Dwellings which are to accommodate a number of families with due regard to health considerations, must be specially constructed, and the solution of the problem is in the hands of the landowner as well as of the local authority.

PATHOGENY OF PULMONARY EMPHYSEMA.

MOST diseases and degenerations have at one time or another been attributed to trophic changes the result of disturbed innervation. Dr. Brown-Séquard believes that nervous disturbances in the pneumogastric play a part in the production of pulmonary emphysema. He does not deny the agency of mechanical forces, but he thinks they have been overrated. Neither forced inspiration nor energetic expiration during closure of the glottis has a preponderating influence in the genesis of emphysema. On the contrary, it is sufficient to excite the vagi as soon after death as possible in order to produce emphysema. The same result is obtained whether the post-mortem excitation be made at the medulla oblongata, at the cervical pneumogastric, or along its terminal branches. In opposition to Serres, it is asserted that stimulation and disease of the pons Varolii only exceptionally induce emphysema, though they are much more effective as causes of pulmonary apoplexy. The nearer the excited area of the pneumogastric is to the lung, the more marked is the emphysema. As of clinical bearing on the experimental question, Dr. Brown-Séquard refers to the development of emphysema with the first attacks of genuine nervous asthma. It is impossible, he argues, that a few short hours of dyspnœa could develop so much emphysema. M. Laborde remarked, in the discussion on the paper, that amongst the decapitated emphysema was frequent. This circumstance is regarded as confirmatory of the opinions held by Dr. Brown-Séquard. Emphysema is common amongst the larger kinds of mammals.

PREVENTION OF BAD TEETH.

THE troubles which arise from disease of the teeth, or from their loss, are not always directly referable to their cause. When actual toothache is present there is of course little doubt, and the remedy of extraction at once suggests itself. At the same time, it must be remembered that the forceps does not undo the work of disease or make amends for its ravages. A jaw which has lost the best part of its function with its teeth, or which bites unequally with the scattered survivors of its former armament, is but a deceitful guardian of the passage to the stomach; while it seems to do duty in mastication it passes intact much that is unfit for the immediate action of the gastric juice. Were the relationship between bad teeth and dyspepsia, with its consequent discomforts, better understood, we should probably hear less of the prevalence of dental caries. Greater attention would then be paid to the small organs whose obscure influence on the general health so fully justifies their preservation. Specific constitutional disease, drugs, and other special factors no doubt account for a certain amount of dental decay. Neglect, however, accounts for much more. Want of care in choosing food, and particularly in cleansing the teeth, has nearly everything to do with the dental worries of a great many people. A point well worthy of note in this connexion is that most of the permanent set of teeth come into active operation during childhood or early youth. It is hardly to be expected that children, if let alone, will pay much attention to the state of their mouths unless driven to notice an aching stump. Thus it happens that most children have lost one or several teeth before they are well into their teens. Here, then, there is need for parental supervision. Mr. W. M. Fisher of Dundee has been led by certain observations, which proved the defective condition of the teeth in a majority of school children, to suggest that some regular system of supervision by a dentist be adopted as a part of school management. The expenses he would have defrayed by the parents, or, should they be too poor, by the State out of the education grant. This plan has actually been adopted in the parochial school at Anerley, in Surrey. We have long been of opinion that it would be most desirable if the health of children in all schools could by some plan be periodically passed under review by a medical inspector. The possible obstacle to such an arrangement would be the expense. This may not prove insuperable, and if it do not, we may hope that this method, and also some plan of dental supervision, may find their place among the recognised forms of school discipline.

ŒDEMA OF VASO-MOTOR ORIGIN.

IN the course of a clinical lecture upon the "Influence of the Vaso-motor System in the production of certain Symptoms" (*Boston Medical and Surgical Journal*, Sept. 24th), Dr. E. T. Bruen showed a case of general œdema in a man forty-seven years of age, who had been healthy until seven days before admission. Some albumen had been found in the urine, but repeated microscopical examination failed to confirm the suspicion of renal disease. There was no cardiac lesion, but there were signs of pulmonary œdema. Dr. Bruen thought the dropsy might be reasonably ascribed to a condition of deficient vaso-motor tonus, and instanced the experimental proof of such a condition in the œdema that follows section of the sciatic nerve, or of its sympathetic filaments where the vena cava has been compressed. The occurrence

of bed-sores in paralytics, and the non-absorption of water injected under the skin of a frog whose nerve-centres are damaged, also point to the possibility of vaso-motor dropsy. Upon this diagnosis, treatment by rest and nerve tonics would suffice to relieve the patient; but as in the case in question the heart was enfeebled, it seemed desirable to relieve the dropsy as soon as possible. For this purpose he preferred prescribing caffein, which is not only a cardiac tonic and nervine stimulant, but a diuretic.

THE SURGEONCY OF THE CITY POLICE.

THROUGH the kindness of a correspondent, we have received information of the regulations which will govern the coming election to the office of surgeon to the City police. These are the same that operate in all other appointments in the gift of the Court of Common Council, with the exception of a recent bye-law dealing with the age of candidates. In none of these provisions is there anything which can be found fault with. The one unfortunate circumstance in connexion with the appointment in question, to which we referred in a former note, is the fact that a qualification as to age, hitherto unknown, was not agreed upon till after the resignation of Dr. Childs. Had some intimation of the proposed change been given at an earlier date, much disappointment and trouble might have been spared to more than one intending candidate. We are informed, however, that some good has been done by directing the attention of the younger medical men to this important appointment, and that consequently a contest somewhat worthy of the office is likely to exercise the discretion of the electors.

THE EXAMINATION OF BLOOD-SERUM.

M. HAYEM proposes the following plan for the chemical examination of the blood-serum of patients:—A puncture is made in the finger with the usual precautions, and from two to two and a half cubic centimetres of blood allowed to flow into a foot-glass; this is allowed to stand in a cold place, special precautions being taken in summer to keep it cool. The serum soon rises to the surface in sufficient quantity for the purposes of examination. Its reaction, which very rarely changes, is alkaline. The colour of serum in a normal condition is a light green, like that of an unripe apple. The tint varies according to the condition of the patient. In jaundice it is a brighter green, and contains biliverdine, and this is the case in other affections of the liver. Under special conditions the serum dissolves a portion of the hæmoglobin of the red corpuscles, thus giving rise to the *serum laqué* of the old authors. M. Hayem has observed this rare colour in the serum of pneumonia and also in hæmoglobinuria, not only during the attacks, but also in the intervals.

GIRLS AT COLLIERIES.

SOME remarks have lately been made with regard to the condition of the girls who work about the pit heads in colliery districts. As described by one of their apologists, they are "roughly clad, black as sweeps, coarse of speech and manner," and, for their sex, of unusually strong physique. Their dress, as a matter of convenience, is masculine. If it were impossible to find for these young women any other than their present occupation, or if men or boys could not be found to discharge their rather manly duties, this method of employing women would not lack a rational defence. This plea of necessity cannot, however, be maintained. The services of girls are no doubt cheaper than those of men. To make use of those of boys would still represent a profit. Yet the question is not one of money only. What pecuniary gain there is on the side of coal-owners represents a certain loss of whatever goes to make a feminine nature, of home training, and perhaps, in spite of assertions to the contrary, of health, to those who may naturally expect some day to guide households of their own. For these deficiencies there is no proposal to indemnify the country. It were surely far better that work admittedly unsuited to the dress and habits of women should be reserved for the male sex.

SUPPRESSION OF A SANITARY JOURNAL IN RUSSIA.

THE English medical press is fortunately not in much danger of the fate which we regret to learn has just befallen a Russian journal devoted mainly to sanitary matters, and entitled *Zdrovye*, or *Health*. This journal having, we believe, ceased to appear for some time, was reorganised, and an advertisement inserted in other journals, announcing its reappearance as a "political, literary, general, and sanitary gazette." It was to be published three times a week, and as a special recommendation the advertisement, which is now before us, stated that it would appear "without undergoing the usual official censorship." It has not, however, escaped the criticism of the authorities, for it is just announced that "the Minister of Public Instruction the chiefs of the Ministry of the Interior and the Ministry of Justice, with the assistance of the chief lawyer of the Holy Synod, have decided entirely to prohibit the publication of *Zdorovye*." The offence which has been so severely dealt with is not of course mentioned, but we can easily imagine that a paper dealing with sanitary (and insanitary) matters would find it very difficult to avoid treading on the toes of propertied officialdom.

FACULTY OF PHYSICIANS AND SURGEONS, GLASGOW.

THE annual meeting of the Faculty for the election of office-bearers was held on the 5th inst. Dr. A. Fergus was re-elected President; and Dr. Henry Muirhead, Visitor. On the Board of Examiners, Dr. John Barlow, Lecturer on Physiology in the Royal Infirmary Medical School, succeeds Dr. James Christie as Examiner in Physiology. Dr. A. Carmichael and Dr. J. Dougall were elected Examiners on Public Health, *vice* Dr. J. Christie and Dr. Eben. Duncan, who were ruled disqualified from election from their holding another examinership. There was no other change in the *personnel* of the Board.

OBSTRUCTION OF THE RIGHT AURICLE BY A HYDATID CYST.

A CURIOUS case has been recorded by M. Ignatieff (*Medizinskoje Obosrenje*, 1885, No. 4). He operated on a young peasant for hydatid of the liver. Thirty grammes of chloroform produced complete anæsthesia. An incision six centimetres long was made in the linea alba. The peritoneum was divided and stitched to the integuments by points of suture. The operator was drawing the cyst forwards to the abdominal wall before puncturing, when the heart of the patient suddenly ceased to beat; this was followed by stoppage of respiration, leading to asphyxia and death, despite tracheotomy and faradisation about the diaphragm. At the autopsy an echinococcus, doubled up on itself, was found to obstruct the last part of the vena cava inferior; it projected into the right auricle. The bladder, when unrolled, measured ten centimetres across, and had a thickness of from three to four centimetres. Neither the auricle nor the ventricle contained any blood. The vena cava near the liver was perforated with a round opening about one centimetre in diameter; this aperture had obviously been caused by the erosion of the wall from the neighbouring hydatid cyst. According to M. Ignatieff, the rupture was effected

at the operation, and a hydatid vesicle, becoming engaged in the torn vessel, was carried upwards, and so caused arrest of the heart.

DAMP HANSOMS.

THE damp hansom nuisance, with its attendant peril, is again forcing itself on our notice. Is it impossible to render the "gondola of London," which is beyond question the vehicle of public choice, both safe and comfortable from a health point of view? If we are not mistaken, one or two of these cabs have appeared in the streets with a projecting glass roof sufficiently extensive to cover the front platform, thus rendering it impossible that the rain should, under ordinary conditions, invade the interior. It would seem a simple matter to extend the roof of almost any one of the modern hansoms in this way, doing away with the guillotine-like window-sash, which now threatens to decapitate the fare, or at least crush his hat, when it is being lowered, and which forms so disagreeable an obstacle to the view, besides half stifling the passenger when it is down. Something ought to be done to improve the hansom, and we fancy the bringing forward of the roof would be a step in the right direction, if not in itself sufficient to remedy the evil of which we complain.

PROPHYLACTIC INOCULATIONS FOR YELLOW FEVER.

Il Morgagni of the 3rd inst reports that Dr. Freire, of Rio Janeiro, has inoculated more than 300 persons with the cultured liquid of the yellow fever microbe. Such inoculations are performed with five or six punctures in one arm, and in a few hours afterwards the patient complains of headache and backache, with a slight rise of temperature. Nausea and vomiting occur in rare cases. These symptoms sometimes last between two and three days, but they are never serious. The inoculations were practised on individuals who were in the centre of the infected locality. None of them died, and only very few presented mild forms of yellow fever. On the other hand, 200 deaths from yellow fever occurred in about three months amongst non-vaccinated persons who lived with those who had been vaccinated.

THE NEED OF A PORTABLE SANITARY STOVE.

THERE is great need for a portable stove which might be used in a sick room, without either poisoning the atmosphere with the fumes of paraffin or the products of combustion, or consuming a large proportion of the available oxygen. The apparatus should be of moderate size, give out a fair amount of heat, be capable of boiling a small kettle of water, and be provided with a flexible tube, which might be conducted into the chimney. Moreover, the stove must, of course, be perfectly safe. There ought to be no great difficulty in devising a heating appliance of the nature required. It would be invaluable for use in cases in which, no nurse being in attendance to keep up an ordinary fire, a moderate temperature might be maintained.

DISORDERLY HOUSES.

A MEMBER of the Bristol Board of Guardians has been convicted under the Criminal Law Amendment Act 1885, of letting two dwellings with the knowledge that the premises were used as disorderly houses, and has been sentenced for each offence to imprisonment for three months. The conviction will, we trust, lead to the suppression of many of these places, and the fact that a member of a local authority has been so soon made an example of will lead to more thorough inquiry as to the character of persons who are now permitted to control local affairs. It is a notorious fact that among the worst house-jobbers who now find their way on to some London vestries are those who let houses which are used as brothels. The increased rental which is paid for houses thus occupied offers a temptation which can only be checked by the penalties to which landlords, under the new Act, are liable.

EFFECTS OF CONTINUED LARGE DOSES OF COCAINE.

DR. MERRIMAN writes to an Ohio medical journal that he has lately seen a gentleman who had been taking cocaine for four months for sick headache, beginning with a drachm of the 4 per cent. solution hypodermically per diem, and gradually increasing this till at last he was found to be taking from five to seven drachms a day. He was very weak, with a pulse of 100, and his mind was wandering somewhat, as in delirium tremens.

A NEW OBJECTION TO TAKING OATHS.

A MEDICAL man, Mr. Strathem of South Bank, Middlesborough, being summoned to give evidence in a case of drunkenness, objected to swear on the Testament, not for the ordinary reason, but on account of the risk of infection. The objection astounded the legal authorities, who ruled that it was not a conscientious objection within the meaning of the Act. The witness at length swore under protest. It must be allowed that there is something in the objection.

SYPHILIS IN CAPE COLONY.

THE *Friend of the Free States and the Bloemfontein Gazette* gives a sad account of the spread of syphilis in Cape Colony. The *Gazette* speaks from memory, but thinks that one out of every three of the colonial coloured population is syphilised. The disease is especially rife in Basutoland and in the Barolong Territory, not only among the natives, but in many places among the burghers and their families. Our contemporary laments the abeyance of all attempts to check the disease and to control those who propagate it. He remarks especially on the prevalence of religious objections to the application of reasonable measures to this end. The disease is spread, by reason of filthy habits, even amongst those who are not guilty of sexual immorality. We do our part to give publicity to these painful facts, and urge on the Legislature to consider them wisely. The existence of a religious feeling that does not prevent the contraction of syphilis, but prevents the application of means for the abatement of it, is a phenomenon for the attention of moralists as well as medical men.

DR. OSLER'S views on medical education and examination, as enunciated in his address at the annual meeting of the Dominion Medical Association, Chatham, Ontario, cannot be charged with ambiguity. There should, said he, be uniformity in the curricula of medical schools, and a complete control of the licensing power be held by the members of the profession. There should be but one portal through which every candidate would have to pass.

THE Medical Society of London will hold its first meeting on Monday next, October 19th, and not on October 26th, as was stated in THE LANCET of October 3rd. The President, Dr. W. M. Ord, will deliver an address, and Dr. W. H. Broadbent will read a paper on Examples of Syphilitic Disease of the Brain and Nervous System.

THE death is announced of Dr. Schweninger, senior physician of the Munich Hospital, and brother of the well-known Berlin professor.

AT a meeting of undergraduates held at the Guildhall, Cambridge, on Monday, a committee was appointed to take action with a view of appealing against the decision of the revising barrister, by which the members of the University *in statu pupillari* are disfranchised.

THE death is announced of Dr. Mackieson, Charlottetown, in his ninetieth year. Dr. Mackieson was the oldest practitioner in Canada, having emigrated from Scotland to Charlottetown in 1821.

WE defer until next week our announcement with respect to the number of new students at the different metropolitan medical schools, as the entries are as yet scarcely complete.

IT is stated that Dr. Crichton Browne has obtained nominations in Finsbury, Hackney, Southwark, East Lambeth, and West Lambeth, for the next School Board.

Pharmacology and Therapeutics.

NITRO-GLYCERINE FOR NEPHRITIS.

BOURGINSKI asserts that nitro-glycerine in small doses diminishes the quantity of albumen in the urine eliminated in twenty-four hours. The quantity of urine in twenty-four hours is also augmented, and the increase is maintained for some time after the discontinuance of the drug. Progressively increasing doses have a still greater influence in diminishing the albumen. He did not observe any appreciable alteration of the specific gravity of the urine or in the weight of the patients. The drug has no deleterious effect on the general condition of the patient, if we except a slight transient headache which supervenes during the first days of employment of the medicine.

BARK OF QUILLAJA.

The two glucosides that exist in the root of polygala senega, and that confer on it medicinal properties, are five times more abundant in the bark of quillaja. This circumstance led M. Kobert to try the effect of the bark of quillaja in the treatment of diseases of the respiratory passages. He has found that the expectorant action is very powerful, and this without causing diarrhœa or vomiting. M. Kobert employs a decoction of 5 grammes of the bark to 200 of water. The adult dose is one tablespoonful, and the children's dose is a teaspoonful.

JEQUIRITY IN GRANULAR LIDS.

Dr. Peounoff having used jequirity in twenty cases of granular lids, varying among one another in character, has come to the conclusion that it is especially useful in a cicatricial condition of the granulations when this is complicated with corneal disease. In these cases, he says, jequirity cures much better and more rapidly than the usual remedies, nitrate of silver, sulphate of copper, &c. It is also valuable in mild cases of follicular trachoma with ingrowing eyelashes. The best method in all cases is to use a 1 or 2 per cent. solution of the powdered seeds of jequirity daily.

HYPODERMIC INJECTIONS OF SALICYLATE OF COCAINE IN NEURALGIA.

Dr. Max Schneider has successfully employed subcutaneous injections of 0·4 gramme (about a quarter of a grain) of salicylate of cocaine in the case of a woman suffering from a third attack of severe neuralgia affecting the second and third divisions of the fifth nerve. Her first attack, which occurred five years previously, had been cured by large doses of quinine. The second attack lasted for nearly six months, and was quite unaffected by quinine, but ultimately yielded to morphia and iron. The third attack had already lasted for four weeks, when the author commenced the use of the cocaine. He injected it into the right cheek eight times in six days, the punctures giving no pain, and being followed by no unpleasant effects. This was followed up by the employment of the constant current, the anode being applied to the painful spots, which corresponded with the points of exit of the branches of the nerve, and the cathode to the neck. The relief from pain and from the consequent insomnia afforded by the cocaine was remarkable, and Dr. Max Schneider thinks that this method of relieving neuralgia is well worth further trial.

HYDRASTIS IN UTERINE DISEASES.

Dr. Shivostirtzeyeff writes in the *Moscow Medical Review* of the satisfactory results he has obtained by the use of hydrastis canadensis in uterine hæmorrhages of various kinds due to a hyperæmic condition of the organ. He gives twenty drops of the fluid extract. The same remedy is, he says, useful in cases where the uterus is enlarged with ulcerated mucous membrane, giving off a copious exudation. Also in cases of dyspepsia due to disorder of the female sexual organs. The drug acts, according to Schatz and Mendes de Leon, on the vessels of the uterus, not, like secale cornutum, on the muscular structure; but it is at present doubtful to which of the three alkaloids—hydrastin, berberin, and another which is not yet known—the hæmostatic action is due.

CAPSICUM IN GASTRO-INTESTINAL AFFECTIONS.

Dr. M. Ceballos Torres of San Pedro, Peru, writes in the *Cronica Médica* of Lima an interesting article on the uses of capsicum as a therapeutic agent in various maladies. He mentions that a certain medical professor who had charge of a hospital clinic had the misfortune to suffer from chronic dysentery which resisted all treatment. He took medicines and enemas of various kinds, and confined himself rigorously to a very strict diet, which after a time became very irksome, so that one day he could not resist the temptation to break through it and risk the consequences. He therefore indulged in a good dinner, with which he took plenty of chilies, and fully expected to have to suffer severely for his imprudence; on the contrary, however, he found himself decidedly better, and therefore repeated the novel treatment of a good dinner with plenty of chilies regularly, with the result that his troublesome affection left him entirely. The writer also mentions that once being in perplexity about a patient with bleeding internal piles, whom he had had under treatment for a long time without producing much effect, he talked over the case with the above-mentioned professor, who suggested capsicum. This was given with food in increased doses. An improvement was soon observed, and after two months of this treatment the patient was completely cured. Other instances in which capsicum given in pills has proved efficacious in various forms of vomiting, anorexia, and bilious fever are mentioned.

ACTION OF CHLORINE AND IODINE ON PILOCARPINE.

M. CHASTAING, in an investigation into the action of the halogens on pilocarpine, an account of which is published in the *Comptes Rendus*, states that when chlorine is passed into a cold solution of pilocarpine in chloroform, protected from light, a soft transparent resin-like substance results, which gives up part of its chlorine when left for some weeks over quicklime, becoming crystalline. When a chloroform solution of pilocarpine is mixed with a solution of iodine in chloroform the colour of the iodine disappears, and if the chloroform is evaporated and the liquid kept in a vacuum over soda lime, part of the excess of iodine is volatilised, and on treating the residue with silver oxide a base is formed. When a solution of pilocarpine is agitated in the presence of light with an aqueous solution of iodine in potassium iodide, no substitution product is formed.

PEROXIDE OF HYDROGEN IN DIPHTHERIA.

Dr. F. Vogelsang has had excellent results from the treatment of diphtheria with peroxide of hydrogen. He gave it to two children who had a severe attack with albuminuria and a high temperature, and found that the false membrane had all disappeared during one night, and the cure was complete in a few days. The abdomen was washed with cold vinegar and water, and cold water poured over the head and neck, a little brandy being given internally, and a teaspoonful every hour of a mixture containing seven ounces and a half of the 2 per cent. solution of peroxide of hydrogen, with forty-five minims of glycerine. The peroxide is not poisonous. Its taste is somewhat sharp, and is well corrected by glycerine.

DUBLIN HOSPITAL SUNDAY will take place this year on the 8th of November.

THE PROGRESS OF CHOLERA IN SOUTHERN EUROPE.

ALTHOUGH the fresh cases and deaths from cholera in Spain fluctuate somewhat from day to day, yet on the whole the diminution which set in some weeks ago may be said to be fairly maintained. Madrid and its immediate neighbourhood are now so far regarded as free from the epidemic that services of public thanksgiving have been held in consequence. If, however, a story which comes from Madrid, to the effect that after a heavy storm some thousands sickened with diarrhœa, be true, then the sanitary state of the place, and especially of its drainage, gives a by no means hopeful view of the capital. From France there is no cholera news in so far as the mainland is concerned; but the disease appeared on board the *Couronne*, a vessel lying in Toulon harbour and belonging to the school of gunnery, and it is stated that thirty cases and seven fatal attacks ensued. The first sufferers formed part of a detachment arriving from Brest, and if they travelled to Toulon by land, it is easy to believe that they contracted their disease on arriving in the infected port. Steps were at once taken by ordering the *Couronne* to sea, and otherwise to prevent any extension of the infection; and so far, we believe, the measures adopted have been successful.

Sicily is the only portion of Italy where cholera has obtained any foothold; but it is evident that it will not be easily got rid of in Palermo, whence the most recent news tells of an increase in the number of fresh cases and of extension to certain fresh localities, such as to the Isola delle Femine, lying off the north coast near Palermo. At Monreale too, to the south-east of the capital of the province, deaths continue to occur; and at Palermo itself the daily number of fatal attacks wavers between forty and fifty. The change of weather is perhaps the most hopeful sign for the island.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF INSPECTORS OF THE MEDICAL DEPARTMENT OF THE LOCAL GOVERNMENT BOARD.

Diphtheria in the parish of Kempston, by Mr. SWEETING.[1]—Diphtheria has off and on, for many years past, clung with considerable tenacity to the town or neighbourhood of Bedford; and during the years 1880-84 the diphtheria death-rate, which was only 0·3 per 1000 in the whole of the Bedford-cum-Kempston registration subdistrict, excluding Kempston itself, reached 5·5 in the latter parish. Bedford town also stood at 5·0 for the same period. Kempston parish is a wide one, about two miles to the south-west of Bedford; it lies low, though at a somewhat higher level than Bedford, and it is geologically on Oxford clay. Some of the dwellings are very unsatisfactory, this remark applying to the old delapidated lath-and-plaster cottages and to others erected, before the bye-laws came into operation, in a worked-out gravel-pit. There is no drainage system, and parts of the village are damp and liable to be flooded. Wells, cesspools, and privy-pits are general. Directly the inquiry commenced, it transpired, as is so often the case, that a number of unrecognised cases of infectious throat illness had prevailed, and by the aid of the school attendance records it was found out that during the four quarters of 1884 there had been 9, 6, 14, and 32 attacks respectively, the fatal cases amounting to 30 per cent. of the whole; the disease also continued in 1885, the special incidence being in children of from three to ten years of age. During 1881 and 1882 no fatal diphtheria occurred in Kempston, and the earliest cases in 1884 were found to have relation with Bedford. So also, the disease continuing almost uninterruptedly in Bedford town ever since 1880, it was the Barracks that were first affected in Kempston, and these lie midway between Bedford town and Kempston village. On the whole, there would appear fair ground for believing that the diphtheria was imported from Bedford. When once it existed in the parish, its extension amongst members of the same families was somewhat considerable, and school attendance played an important part in spreading it from one family to another. In two schools children are received up to fifteen years of age; in the infant school the ages were from three to seven years; and whereas the percentage of attacks to average attendance was 2·0 and 8·1 in the two former schools, it was as high as 24·4 in the latter. But it also transpires that in the infant school, and at the particular time when diphtheria was spreading most rapidly, there was excessive overcrowding. In dealing with the epidemic Dr. Prior, who has had much experience with diphtheria, was hampered by the absence of any local means of isolation, and no closure of the principal school affected was thought desirable by him because the risk of infection by personal communication at home seemed to him to be less than that caused by bringing together at school children undergoing various phases of throat malady. The recommendations attached to the report deal with such matters as the need for drainage, improved water-supply and privy accommodation, removal of filth, isolation of the sick, and the principles affecting the question of school closing.

Enteric Fever in the rural district of Lincoln, by Dr. GRESSWELL.[2]—Dr. Gresswell's report gives interesting details as to local outbreaks of enteric fever. One occurred at Faldingworth, to which village a girl in service returned ill in Sept. 1884, and before the end of December two other cases had occurred in the same house, and five other families were infected. Either directly or indirectly there had been communication between the house first infected and the dwellings subsequently attacked; but the method of infection was probably not aerial, for all the families attacked after the girl's first arrival had used water from the well belonging to her parents, and although the stools from her household were from the first buried, the water used for the washing of their linen was thrown on to a dry-steyned gutter immediately overlying the well and conducting to an untrapped sink-cesspool only a yard or so from the edge of the well. In considering the cause of the extension, Dr. Gresswell explains that though some persons who used this well were not attacked, yet the well on being cleaned out was found to have been fouled by soakage from the sink-cesspool, and no case of enteric fever has occurred since the pump was disused. And he cites two reasons in favour of water rather than aerial communication. One is a well-recognised one—namely, that several members in one family would sicken on the same day; and the next is that the age of one of the patients, who had reached seventy-seven years, "precludes the likelihood of air-borne infection" under the circumstance of mere visits such as were paid in this instance. The other outbreak was in the parish of Barlings, which comprises the hamlet of Barlings and the village of Langworth. Here again, the case of a servant-girl in Langworth returning ill to her home in Barlings in August last is the initial one of a severe group of attacks in the former place, the attacks being unexplained by intercommunication, milk-supply, &c. But the water-supply is carried by pipes from the Langworth Beck, and the pipes, it was afterwards ascertained, had been subject to leakage of sewage since the preceding June or July. It appears that about that date a well was cleaned out to which this Beck water was delivered, and in order to cut off the supply some of the water-pipes in the Beck immediately under a sewer were removed, and it was not until November that it was ascertained that the pipes had been relaid, not in puddled clay as heretofore, but in mere rubble. Here again, after such alterations as removed all chance of further pollution no further case arose. In both the instances quoted it is evident that the villages in question need a different water-supply, and it ought not to be difficult to provide them with one that shall not be subject to the risk of sewage pollution, and so to the reception of specifically infected material.

Diphtheria and Enteric Fever at Tottenham, by Mr. SWEETING.—As far back as 1873 inquiry was made as to enteric fever in Tottenham by the late Mr. Netten Radcliffe, who attributed it mainly to faulty conditions connected with the sewerage, and especially to the forcing back of sewer air into dwellings. Since that date the fever death-rate has been almost uniformly high; and diphtheria has

[1] Sold by Knight and Co., 90, Fleet-street; Shaw and Sons, Fetter-lane; Hadden, Best, and Co., West Harding-street; and P. S. King and Co., King-street, S.W.

[2] See note *ante*.

risen during the years 1881-84, attaining its maximum in the latter year. The means of sewer ventilation and flushing still remain defective; that which has been carried out being insufficient to keep down even obvious nuisance as regards the state of some of the sewers, and locally a very strong belief obtains that the prevalence of diphtheria and enteric fever has been due to these faulty conditions. Then, again, in the matter of house drainage Tottenham is in a very backward state; and in 65 per cent. of the houses attacked with diphtheria defects were noticed. Frequently, also, a single cistern affords water both for domestic use and for flushing the closet, and the common cistern is often so placed as to favour the impregnation of the contained water with closet emanations. The scavenging arrangements, too, are quite inadequate to the needs of the district. There are, also, no means for the isolation of the infectious sick, but it may be hoped that the sanitary authority have at last decided to provide a proper isolation hospital. With all the defects mentioned, there has been some noteworthy sanitary progress; and in so far as defects of house construction are concerned, the authority have now an excellent code of bye-laws, and they have taken the very necessary step of appointing a building inspector to see that the regulations are properly carried out.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5622 births and 3011 deaths were registered during the week ending Oct. 10th. The annual death-rate in these towns, which had been equal to 15·9 and 17·6 per 1000 in the preceding two weeks, was again 17·6 last week. During the thirteen weeks of last quarter the death-rate in these towns averaged only 18·8 per 1000, which was 2·6 below the mean rate in the corresponding periods of the nine years 1876-84. The lowest rates in these towns last week were 13·8 in Leicester and in Wolverhampton, 14·0 in Derby, and 14·1 in Bristol. The rates in the other towns ranged upwards to 22·6 in Cardiff, 22·7 in Manchester, 23·3 in Plymouth, and 28·1 in Preston. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had steadily declined in the preceding nine weeks from 930 to 366, further fell last week to 303, and were considerably fewer than in any previous week of this year; they included 97 from diarrhœa, 51 from whooping-cough, 49 from scarlet fever, 42 from "fever" (principally enteric), 38 from measles, 24 from diphtheria, and 2 from small-pox. These zymotic diseases caused the lowest death-rates last week in Hull, Brighton, and Blackburn, and the highest in Portsmouth and Preston. Diarrhœa caused the greatest mortality in Portsmouth and Preston; "fever" in Halifax and Cardiff; scarlet fever in Birkenhead and Preston; and measles in Salford. Of the 24 deaths from diphtheria in the twenty-eight towns, 14 occurred in London and 2 in Salford. Small-pox caused 3 deaths in London and its outer ring (including 1 in the metropolitan asylum hospital ship off Dartford), and not one in any of the twenty-seven provincial towns. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had declined in the preceding eighteen weeks from 1389 to 131, had further fallen to 112 on Saturday last; the admissions, which had been 47, 27, and 18 in the preceding three weeks, further declined last week to 15. The deaths referred to diseases of the respiratory organs in London, which had been 159 and 205 in the preceding two weeks, further rose last week to 231, but were 23 below the corrected weekly average. The causes of 55, or 1·8 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Bristol, Leicester, Newcastle-on-Tyne, Sunderland, and in nine other smaller towns. The largest proportions of uncertified deaths were registered in Halifax, Sheffield, and Hull.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 17·4 and 16·4 per 1000 in the preceding two weeks, was again 16·4 in the week ending the 10th inst., and was 1·2 below the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 10·6 and 11·4 in Leith and Paisley, to 17·6 in Greenock and 19·5 in Glasgow. The 400 deaths in the eight towns included 18 which were referred to diarrhœa, 12 to scarlet fever, 8 to whooping-cough, 7 to diphtheria, 4 to "fever" (typhus, enteric, or simple), and not one either to small-pox or measles; in all, 49 deaths resulted from these principal zymotic diseases, against 59 and 41 in the preceding two weeks. These 49 deaths were equal to an annual rate of 2·0 per 1000, which was 0·2 above the mean rate from the same diseases in the twenty-eight English towns. The 18 deaths attributed to diarrhœal diseases showed an increase of 5 upon the number in the previous week, but were 38 below the number returned in the corresponding week of last year; they included 9 in Glasgow, 4 in Dundee, and 3 in Aberdeen. The 12 fatal cases of scarlet fever exceeded the number returned in any recent week; 7 occurred in Glasgow and 2 in Aberdeen. The deaths from whooping-cough, which had been 9, 8, and 9 in the previous three weeks, were again 8 last week, all of which occurred in Glasgow. The 7 fatal cases of diphtheria exceeded the number in recent weeks, including 3 in Glasgow and 3 in Edinburgh. The deaths referred to "fever," which had been 7 and 6 in the previous two weeks, further declined to 4 last week, of which 2 occurred in Glasgow and 1 each in Edinburgh and Greenock. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 59 and 58 in the preceding two weeks, rose to 64 last week, and exceeded the number returned in the corresponding week of last year by 12. The causes of 64, or 16 per cent., of the deaths in the eight Scotch towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had declined in the preceding four weeks from 26·7 to 21·1, was again 21·1 in the week ending the 10th inst. During the thirteen weeks of last quarter the death-rate in the city averaged 22·9 per 1000; the rate during the same period did not exceed 18·1 in London and 15·5 in Edinburgh. The 143 deaths in Dublin last week corresponded with the number in the previous week, and included 4 which were referred to diarrhœa, 3 to "fever" (typhus, enteric, or simple), 3 to scarlet fever, 1 to whooping-cough, and not one either to small-pox, measles, or diphtheria. In all, only 11 deaths resulted from the principal zymotic diseases, against numbers declining from 27 to 14 in the preceding four weeks, and were equal to an annual rate of 1·6 per 1000. The rate from the same diseases last week was 1·8 in London and 1·0 in Edinburgh. The 4 deaths attributed to diarrhœa showed an increase of 1 upon the number in the previous week, while those referred to "fever" were fewer by 2. The fatal cases of scarlet fever exceeded the number in the previous week by 1. Nine deaths from violence and 8 inquest cases were registered; and 40, or more than a quarter of the deaths, occurred in public institutions. The deaths of infants showed a decline, while those of elderly persons were more numerous than in either of the previous two weeks. The causes of 19, or more than 13 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

A DISTINGUISHED service reward has been bestowed upon Surgeon-General J. H. Innes, C.B., Honorary Surgeon to Her Majesty.

ARMY MEDICAL STAFF.—Surgeon-Major Richard William Berkeley, to be Brigade Surgeon, vice Edwin Jas. Hopwood, granted retired pay; Surgeon-Major James Martin has been granted retired pay, with the honorary rank of Brigade Surgeon; Surgeon-Major Valesius Skipton Gouldsbury, M.D., C.M.G., from the Seconded List, to be Surgeon-Major; Surgeon-Major Valesius Skipton Gouldsbury, M.D., C.M.G., is granted retired pay, with the honorary rank of Brigade Surgeon. The under-mentioned Surgeons-Major are granted retired pay, with the honorary rank of Brigade Surgeon:—William S. Hedley, M.D., and Joseph Eustace Fishbourne. The under-mentioned Surgeons to be Surgeons-Major:—George Thomas Langridge; Breame Weston Fowler; William Edward Webb, M.B.; Reginald William Mapleton, M.B.; Wm. Launcelotte Gubbins, M.B.; Richd. Gillham Thomsett; Peter John McQuaid, M.D., and James Ring, M.D.

ADMIRALTY.—The following Surgeons have been promoted to the rank of Staff Surgeon in Her Majesty's Fleet:—

Theodore Julian Preston, William Pearson, M.D., and Charles Lym Vasey. The following appointments have been made:—Staff-Surgeon William Pearson, M.D., to the *Raven;* Surgeon Alfred H. Miller, to the *Vernon*, additional; and Surgeon George Bate, to the *Boscawen*.

Correspondence.

"Audi alteram partem."

THE TITLE OF "DOCTOR" FOR LONDON MEDICAL STUDENTS.

To the Editor of THE LANCET.

SIR,—Mr. C. St. J. Wright, M.B. Aberd., in his recent letter to you ignores the point of the grievance of London students against the English Royal Colleges. Were the point at issue really what he states it to be—viz., that it is proposed to give students who have undergone an inferior course of study, and who have obtained the diplomata of the conjoint Colleges, the title of "doctor," which "is given to those who have taken the extra trouble, and gone to considerable extra expense, to gain a university degree in addition to the membership of the College,"—there would be some just grounds for the Colleges declining to accede to the proposal, originally, I believe, put forward by myself, and since so ably advocated by Mr. Hickman, M.B. Lond., for them to obtain a charter granting the right of giving degrees instead of diplomata. The truth is, the men on whom the Colleges inflict a serious loss of status are many; while the men who have been driven to incur "extra trouble" and "considerable extra expense," in order to obtain a mediocre Scotch or Irish degree, are a small minority of those who obtain these qualifications. The great majority of these graduates have passed the whole of their studentship at the university selected; they have paid much in small class, hospital, and examination fees; they have found living much cheaper; and if all one sees, hears, and gathers from experience is to be relied on, they have found the work easier and the terms shorter than in London. Even in Edinburgh the term of study is four months shorter than in London, since four academical years only equal the period of forty-five months required by the College of Physicians, while in Scotland the winter session commences on November 1st, a month later than the English session. We have it on the authority of Dr. Arthur Jacob of Dublin that degrees can be obtained after two years and nine months' study. The men who, having already passed four years in study in England, go over the border or across the Channel, and who then (after undergoing an extra course of study to keep the terms required by the regulations) obtain a degree, are in a small, though unfortunately an increasing, minority. They are not the men against whom the public generally, and the Royal Colleges in particular, have to measure the professional calibre of the English diplomats. Any man, no matter how well read he may be, must necessarily increase his knowledge by an extra course of study. My complaint is that men who have not undergone this extra course, nor indeed a period of study equivalent to the English course, pose themselves before the world as men of superior education simply because they have studied in a school, often but little known to fame, where they give a certificate, form X, while men who have been the pupils of the first surgeons and physicians of the day, and who are *alumni* of the grand old English hospitals, only obtain a certificate, form Z.

I should like to ask Mr. Wright whether it was not the fact, when he was at Aberdeen, that the London hybrids held themselves aloof from the true Aberdonian students, on whom they looked down, and by whom they were proportionally revered and looked up to as men who, knowing a thing or two, and who had seen something of the professional world. If it was not so, his experience was peculiar; and if it was, what then becomes of his argument that graduates of most of the British universities are, as such, superior in acquirements to the diplomats of the English Colleges? In Trinity College, Dublin, there is an approach to the academical systems of Oxford and Cambridge, which Englishmen, the University of London notwithstanding, usually include in their idea of a university; but elsewhere, the undergraduates appear to live in lodgings, or with friends, just as the English students do; indeed, students living in hall, as some do at Bart's, King's, University, St. Mary's, and Queen's, Birmingham, are following the ideal university curriculum more closely than are most Scotch and Irish undergraduates.

What London students require is a University—i.e., after all, only a union of Colleges, so styled by Royal Charter—which shall grant them degrees after undergoing a curriculum of study and after passing examinations equal in stringency to those of most of the British Universities. The English Colleges should not be permitted to put up their standard unduly. London students hold that the examinations of the English Colleges are now at least equal as tests of professional acquirements to those of most of the existing universities in the three kingdoms.

To attempt to lower the London University standard to that of the Scotch and Irish universities, which would alone meet the wants of London students (and which must, I contend, affect the standards of the Intermediate and Second M.B. Examinations quite as much as it does those of the Matriculation and the Preliminary Scientific Examinations), would be a grave misfortune. To do so would inflict a serious injury on many men who have worked hard for six or seven years to obtain what is now rightly esteemed the blue ribbon in medicine. It would be as reasonable to ask the College of Surgeons to make all members Fellows on payment because the Edinburgh College has thought fit to make gentlemen who have attained its L.R.C.S. Fellows after having been nominated and after having paid extra fees.

London students, then, demand not only that they shall obtain a degree for the same amount of work that Scotch and Irish students do, but that the new arrangements to be made by the conjoint Colleges shall have a retrospective effect, and that all existing members and licentiates shall be included in the benefits of the scheme: Licentiates and Members of the Royal College of Physicians to be granted the degrees of Doctor and Bachelor of Medicine, and Fellows and Members of the Royal College of Surgeons the degrees of Master and Bachelor of Surgery respectively in the University of England or St. George—ambiguity should be avoided in selecting a title.

The gist of the whole matter lies in a nutshell. Unless the English schools, metropolitan and provincial, are prepared to see their students minish from among the children of men, they must be prepared to take action on the lines I have indicated, and that without further delay. It is simply monstrous that all our lunacy and hospital physicians appointments are practically handed over to Scotch and Irish students, all but some 3 per cent. of English students being practically disqualified to hold them. At Bethlem Hospital, I believe, it was recently the rule that a M.D. Q.U.I., who might have obtained his degree with less than three years' study, was eligible for an appointment on the staff, while a M.B. of the University of London was not, a doctor's degree being an essential. English students are surely strong enough to see themselves righted in this matter. Let them remember that union is strength, and I shall be glad to co-operate as long as I am in England with any gentlemen who will aid the formation of an association (if no existing organisation can undertake the duty) having for its object the granting of degrees for English students on similar condition to those on which Scotch and Irish students obtain them. I am, Sir, yours, &c.,

SHIRLEY DEAKIN, F.R.C.S. Eng.,
Surgeon, I.M.S.

Southsea, Sept. 25th.

POOR-LAW MEDICAL OFFICERS' SUPERANNUATION AND MEDICAL MEMBERS OF PARLIAMENT.

To the Editor of THE LANCET.

SIR,—At the meeting of the Council of the Poor-law Medical Officers' Association, held at their rooms, 3, Bolt-court, Fleet-street, on Thursday, the 8th inst., the case of Mr. Isaac Flower *(inter alia)*, until recently medical officer of the Codford St. Peter's district of the Warminster Union, Wilts, was taken into consideration, and a resolution was come to that I should lay the facts before the medical public through the columns of THE LANCET, and, in accordance therewith, I have respectfully to request insertion of the following in this week's issue:—

Mr. Flower was appointed district medical officer on the formation of the Union forty-nine years ago, and has held office uninterruptedly during the whole of that lengthened period to the satisfaction of the poor and the board, before the latter of which he has never been arraigned, nor his conduct in any way questioned. His salary, inclusive of all extras, was £100. Last summer, finding that infirmities were coming upon him which would interfere with the due performance of his duty (he has entered on his seventy-fifth year), he tendered his resignation, and at the same time made application for a superannuation allowance. In due course the question came before the Board of Guardians for consideration. At such meeting Lord Shaftesbury moved that a permanent annuity should be granted; this was negatived. It was then proposed that one year's salary should be given in the form of a gratuity. To this an amendment was made that the sum should be £50 only. This, on being put to the vote, was carried by 12 to 11; but we learn that up to the present Mr. Flower has not signified his acceptance of this insulting offer. He has, however, written to the Local Government Board stating the facts, and asking their interference, and has received in reply "that it is entirely within the discretion of a board of guardians whether or not they will grant a superannuation allowance, either for a limited period or otherwise, to an officer on his ceasing to hold office; but they would, if he desired it, forward a copy of his letter for the consideration of the Warminster guardians"—a perfectly useless procedure *per se*, as the board would merely direct that the Department's communication should be laid upon the board-room table.

Having regard to the lengthened tenure of office, the high character of Mr. Flower, and his advanced age, this procedure of the Warminster Board of Guardians is in the highest degree unjust to this gentleman. And this brings me to the next point in my letter, where, let it be distinctly understood, I write for myself alone, and not under the direction of the Council. I refer to an increase of medical Members of Parliament, by whose aid only can this permissive Superannuation Act be amended, as well as other legislative requirements affecting the pecuniary and social interests of medical men.

I see that there are several medical candidates before the constituencies, and I further note that two of the Scotch Universities, as well as the London University, have candidates competing who are not of the medical profession. It is not to be expected that the present representative of the London University can be disturbed; but we surely can, if we like, wrest the two Scotch seats from the hands of the lawyers or laymen. In the case of Edinburgh and St. Andrews we have an able, nay gifted surgeon, Mr. Erichsen. I trust I shall not be held to be presumptuous in asking my fellow-graduates to disregard all considerations as to whether this gentleman be a Liberal or Conservative, but vote straight for him solely on the grounds that he is a high-class medical man. I would urge the same policy in every borough or division of a county where a medical man is a candidate, and I do so for the reason that there will be plenty of candidates left to take care of general political considerations. Unless we are up and doing on this occasion, we shall be in the future, as we have been hitherto, without political influence in the councils of the nation, a want which I have experienced most strongly during the thirty years I have striven to secure medical Poor-law and sanitary reform through the action of the House of Commons.

I am, Sir, yours obediently,

JOS. ROGERS,

Chairman, Poor-law Medical Officers' Association.

Montague-place, Russell-square, Oct. 12th, 1885.

MR. HOLMES' INTRODUCTORY ADDRESS.

To the Editor of THE LANCET.

SIR,—I see that in commenting on my introductory address you quote a passage which you believe to be intended to apply to the Scotch universities. It was not so intended; and, as far as I see, bears no such construction. I meant it to refer to any universities, whether in or out of England, in which there is no guarantee that the title given corresponds to any real superiority in professional acquirements or experience.

I am, Sir, yours faithfully,

Great Cumberland-place, W., Oct. 13th, 1885. T. HOLMES.

THE RECENT SANITARY CONGRESS IN LEICESTER: VACCINATION *v.* ISOLATION.

To the Editor of THE LANCET.

SIR,—There seems to be so much misunderstanding as to the position which Leicester and its health authority occupies in regard to the question of vaccination, that I shall be obliged if you will permit a short explanation to appear in your journal, and I ask this favour the more seriously after a perusal of the leading article in the last issue of THE LANCET. The system of isolating cases of small-pox, introduced by our late officer of health, was carried out as a measure of safety and protection, and in nowise with a view of depreciating vaccination, in the value of which Dr. Johnston was at the time a firm believer. Having proved its efficiency, year after year, we cannot do other than continue the plan whenever occasion calls for it; it would be criminal on our part not to do so. In speaking of the Sanitary Congress I did not say (as your article states) "there had been no death from small-pox during the last seven years." That is not correct. In 1882, out of a number of cases treated in our hospital, there were five fatal cases. What I said was that since 1872, now thirteen years, there had been no epidemic of small-pox, whereas in that year there were 346 deaths from the disease, and previous to that time—when vaccination was practised almost universally—epidemics of small-pox appeared at regular intervals. The result of our system of isolation has been a disappearance therefore of the disease in epidemic form, as yet; while the outcome of vaccination in towns like Birmingham, Nottingham, and London, where vaccination is duly observed, is the constant appearance of small-pox, in more or less virulent form. Surely, if your theory were correct, the facts ought to be precisely the reverse of this. But granting all that can be said in favour of vaccination, does it not become the duty of all health authorities—with the sad experience of constant failure of the existing system, from whatever cause, whether inefficient vaccination or neglect of re-vaccination—to adopt some other or additional method of stamping out this hideous disease? Ought we not to pity those who have so deeply suffered in towns where no reproach can be brought on the score of their being anti-vaccinators? These populations being vaccinated were, according to the medical theory, not susceptible, but the disease appeared and slew its victims notwithstanding. You compare Leicester to a town in which wooden erections should gradually replace those built of brick and stone, and have no difficulty in foreseeing the time when the best fire brigade would be perfectly helpless to prevent a general conflagration. Unfortunately for the figure the conflagrations constantly appear in towns such as I have named, where they do not change the brick and stone into wood; and in London alone, as Dr. Seaton, the officer of health for Chelsea, shows clearly in his last report, millions of money have been spent in the vain attempt to prevent or stamp out small-pox, with the result that its ravages are more fatal than ever! It is evident, then, that you have not yet extinguished the conflagration at your own doors, in the well-protected and non-susceptible population of London. Ought not your warnings therefore to be reserved for those nearer home, rather than for Leicester?

One other point in your article I should like to refer to. You say: "If Leicester could ensure its inhabitants against disease introduced into their town, it cannot extend the same protection to those who wander to other places. Already we are hearing of the results of the introduction of these unfortunates into other towns, and this raises a larger question than the safety of Leicester folk. ..... Leicester is, indeed, threatening to become a serious nuisance to other towns." This, of course, is a question which concerns the opponents of vaccination rather than the health authority. Still, I think it ought to be stated that as yet, since the isolation system was adopted here, the cases of small-pox we have had to deal with have been imported from other (and vaccinated) towns, London amongst the rest, which towns have thus been a constant nuisance to Leicester; and in the one case in which a working man from this town contracted the disease in London, and while suffering was sent back to Leicester, he had been vaccinated, and therefore ought not to have been susceptible to the disease, nor could

he possibly be a proof that Leicester was becoming a nuisance to other towns.

To return to your figure of speech. If a town were built of wood, an efficient brigade would be able to cope with a fire, if it reached the spot on the instant of its outbreak; and this has been our experience for some years in dealing with small-pox. Would it not be well if other towns were to adopt our plan, instead of wringing their hands over the failure of vaccination; and might not the medical journals render good service by recommending strict isolation, as practised in Leicester, in addition, if you will, to vaccination? I hope they will lose no time in doing this.

I am, Sir, your obedient servant,

THOMAS WINDLEY,
Leicester, October 14th. Chairman of the Sanitary Committee.

*** We accept Mr. Windley's correction that the system of isolation of the healthy who have been exposed to infection as well as those who are suffering from small-pox has not altogether prevented deaths from this disease in Leicester; and we share with him the conviction that this system has been instrumental in preventing until now the epidemic prevalence of the disease. But we are none the less convinced that the system cannot be trusted to replace vaccination, and that Leicester will eventually be brought to hold the same opinion after a lamentable sacrifice of human life.—ED. L.

ON CIRCULAR HOSPITAL WARDS.

To the Editor of THE LANCET.

SIR,—In reply to Mr. Snell's letter, published in THE LANCET of the 10th inst., I can only regret that any feeling should be aroused, as I wish, above all things, to be kindly and courteous, and to state only the precise facts. Mr. Snell's anger grieves and surprises me, for, at the worst, we may discuss so dry a subject as the shape of a ward, and entirely differ in our views, without offence, and with the kindliest feelings towards each other. The facts of the case are, so far as I know them, as follows:—

1. The only six hospitals in the United Kingdom which have 500 beds and upwards, are—Edinburgh, Royal, 517; Glasgow, Royal, 584; St. Thomas's, 590; St. Bartholomew's, 676; Guy's, 700; and the London—the largest hospital in Great Britain—780.

2. I do not know of any large British hospital that has been built from Mr. Snell's plans; though, of course, I know of the enlargement of the Hull Infirmary. The plans designed by Mr. Snell, within my knowledge, are chiefly of Poor-law buildings.

I have received much courtesy from Mr. Snell; I recognise much useful work he has done, and I would not knowingly annoy him or hurt his feelings.

I am, Sir, yours, &c.,

HENRY C. BURDETT.
The Lodge, Porchester-square, W., Oct. 10th, 1885.

To the Editor of THE LANCET.

SIR,—In the paper read by me upon the above subject at the Leicester Congress, I showed that if the system of constructing circular wards were continued, the benevolent public must be prepared to pay very heavily for the luxury (if it were one), and I estimated the increased cost at about £105,000 for every 1000 patients. I also showed very plainly that no advantage would accrue from such an increased outlay, but that, on the contrary, the inmates of these circular wards would not be housed under such favourable hygienic conditions as they would be if they continued to occupy the parallelogram-shaped wards. Captain Galton and Professor De Chaumont, two of the most eminent authorities upon the subject of hospital construction, supported my views, and so also did two architects of large practice and experience in these matters; and it will be remembered that I based my assertions upon the writings of some of the most eminent experts in this country.

Mr. Burdett, in the communication published in your issue last week, gives a complete denial to all my statements, and occupies more than two pages of your valuable space with the expression of his own opinions upon this important subject, unaided by a single reference to any authority who would support his statements. For this, and for trying to carry his point by contorting facts, he might be excused, but not so where he founds his argument upon misquotations from the work published by Dr. Mouat and myself upon hospital construction. Many of the figures contained in the "table" he says he has compiled from this work are not mine at all, and it will be well, therefore, to bear this in mind when the arguments are read upon which he founds his contentions.

I propose, with your permission, to answer Mr. Burdett's letter fully if you will give me space, but my time is too much occupied this week to do so.

Let me, however, point out how great a responsibility will devolve upon the managers of any institution who would contemplate the further erection of circular wards until my assertions as to its extravagance, and those of the eminent experts mentioned by me, have been answered by some higher and more reliable authority than Mr. H. C. Burdett. I am, Sir, yours obediently,

H. SAXON SNELL.

*** We regret that our space at the present time will not allow of further lengthened discussion of this subject.—ED. L.

REMUNERATION FOR EXTRA MEDICAL SERVICES.

To the Editor of THE LANCET.

SIR,—Will you kindly insert the enclosed communication in your issue of this week, and oblige, yours truly,

J. WICKHAM BARNES.
Poor-law Medical Officers' Association, Bolt-court, Fleet-street, E.C., Oct. 13th, 1885.

At a meeting of the Council of the Poor-law Medical Officers' Association, held at their rooms, 3, Bolt-court, the subjoined resolution was unanimously adopted:—"That this Council, having perused the correspondence relating to the epidemic of small-pox in Camberwell, regrets to find that two medical members of the Board have unjustifiably, on apparently insufficient grounds, opposed the grant which was proposed to be given to the district medical officer for extra services in visiting and attending a great number of non-pauper cases of small-pox, more especially as at the same meeting a gratuity was granted to the relieving officers for the extra work they had performed in connexion with such cases. And this Council further desires to express its recognition of the courteous and kind consideration exhibited by Dr. Massey in his advocacy of the just claims of such officers."

MANCHESTER.

(From our own Correspondent.)

THE MEDICAL SOCIETIES.

THE Medical Societies have commenced work for the coming session, the first meeting of the Medico-Ethical having been held on the 25th ult. A paper, which led to some discussion, was given by Dr. Tatham, the medical officer of health for Salford, on the Relation of Health Officers to Local Authorities, in which he took a rather gloomy view of affairs, and pointed out the very unsatisfactory position of those officials under the present law, showing that they held office entirely subject to the local authority under which they acted; and that if they in the fulfilment of their duties offended members of their committees, as not unfrequently happened, their lives were made almost unbearable by the treatment they received. He was in favour of giving a power of veto to the Local Government Board in the case of appointments and dismissal of all medical officers of health. We have now no less than half a dozen societies more or less flourishing here—viz., the Medical Society; the Pathological Society, an offshoot of the former, which has now entered on a separate existence, and bids fair to become possessed of considerable vitality; the Medico-Ethical; the New Central Medical Society, which appears likely to be a success judging from the number of its members, which already reaches nearly one hundred; the Medical Students' Debating Society; and, lastly, an Odontological Society, recently formed, under the presidency of E. W. Smith, M.R.C.S., and to which most of

the leading dentists of the city have given their support and encouragement.

OWENS COLLEGE.

There has been no special introductory address given in the medical department of Owens, but Dr. Cullingworth, in accordance with custom, being the junior professor of the College (having been recently elected Professor of Obstetrics), gave a public lecture on Tuesday last introductory to the general session of the College, taking as his subject "The Criminal Responsibility of the Insane."[1] Principal Greenwood presented the report of the Dean of the Medical School, and gave the results of the examinations at the London and Victoria Universities during the past year; he stated that the record was highly satisfactory, two scholarships and four gold medals having been gained at the London University. At the opening last Saturday of the session of University College, Liverpool, at which Lord Derby presided, Professor Greenwood also was present, and, in his capacity as Vice-Chancellor of the Victoria University, he offered the newly affiliated College a hearty welcome as an integral part of the new University.

OPEN SPACES.

Although much fault has at various times been found with the Corporation for not taking advantage of all opportunities for providing open spaces and recreation-grounds for the people, there is still gratifying evidence that it is alive to the importance of the matter. On September 26th, the Mayor, in the presence of a large gathering of members of the Council and the public, opened a new park of six acres at Cheetham, which is about the middle of Cheetham Ward, and which has been obtained at a total cost for laying out, &c., of £15,000. A gymnasium, with swings, &c., has also been provided in it. Among the speakers was Mr. Firth, M.P., who said that no more useful way of spending public money for the benefit of the people could be found. A scheme that was lately agitated for acquiring part of the Potter Estate as a public park appears to have fallen through; but there is every probability that some twenty acres of the Bird fields, in the same suburb of the city—viz., Rusholme—is about to be acquired by the Parks Committee for recreation purposes. All will admit that if open spaces and pleasure-grounds are to be obtained, they must be secured before the omnivorous builder gets possession of the land; for, once within his grasp, the value is so great that the cost of obtaining such spaces is more than the overburdened ratepayer can bear.

A PUBLIC CENSOR.

About twelve months ago we were regaled by some highly spiced "leaves from the diary of a city auditor," in which sundry abuses and unnecessary expenditure by various committees of the Corporation were exposed to public criticism, and, as a result, certain reforms have been initiated. We are at present having another series given us by the colleague of the former writer, who has sharply criticised the expenditure of the Health Department. He calls the Health Department the octopus of the Corporation; and among other items of extravagance he cites that the Corporation pays to the Children's Hospital a sum of £200 a year and 25*s.* a week for each patient sent there. As the Corporation has no fever hospital of its own, it is bound to make arrangements for the reception of infectious diseases in the existing hospitals, and it is doubtful whether this could be done at less cost in a hospital managed by the Corporation, to say nothing of being relieved of all the work and reponsibility of management of such institutions.

SMALL-POX AND FEVER.

The small-pox epidemic has now practically come to an end. From the report recently published by the Royal Infirmary of cases admitted into their hospital up to the end of June, the usual striking difference in the death-rate of the vaccinated and unvaccinated cases is shown; in the former it was only 5·7 per cent., in the latter 56·4. The total mortality amongst 300 cases admitted up to June 24th was 14·4. A somewhat remarkable item in the report is the statement that there have been admitted into the fever wards during the year 114 patients not suffering from any infectious disease. It is usual for a certain number of cases, especially pneumonia, to get sent into fever hospitals as fever, but the above is an unprecedentedly large proportion of such cases.

Manchester, Oct. 14th.

[1] This address is given in full in our present number.—ED. L.

EDINBURGH.

(From our own Correspondent.)

ROYAL INFIRMARY.

THE number of in-patients treated at the Royal Infirmary during the twelve months ending Sept. 30th was 7854, as compared with 7624 treated during the previous year, showing an increase of 230 patients for the year 1884-85. During the same period 479 deaths took place in the hospital, as compared with 520 in the previous twelve months, being a decrease of 41 deaths for the year.

EDINBURGH UNIVERSITY COURT.

At a meeting of the University Court held on the 12th inst. sanction was given to a project emanating from the Senatus Academicus for the institution of a University Lectureship on Comparative Embryology. Lectures will be delivered both in the summer and winter sessions. The fee for the course was, on the recommendation of the Senatus, fixed at two guineas. This may be considered as the first step in the direction of University extension within the University itself; for the new lectureship, although its subject-matter will trench pretty closely here and there upon that of the chairs of Natural History and Physiology, will supply a want that has long been felt in connexion with the teaching of the natural sciences in Edinburgh, and will raise the University programme of teaching one degree nearer to that which should be attained by a thoroughly equipped school of science. At the same meeting of the Court the following extra-academical lecturers were recognised as teachers of medicine whose courses of instruction will qualify for graduation under the provisions of the Universities (Scotland) Act, 1858:—In Natural History, Professor D'Arcy Thomson, lecturer on Zoology, Dundee; and in Practical Materia Medica, the Rev. John Lowe, F.R.C.S.Edin., Mr. J. Rutherford Hill, and Mr. Urquhart, all of Edinburgh. The following appointments by the professors were approved:—Mr. David Hepburn, M.B., C.M., assistant to the Professor of Anatomy; and Mr. R. E. Allardice, M.A., assistant to the Professor of Mathematics.

IRELAND.

(From our own Correspondent.)

QUEEN'S COLLEGE, CORK.

THE President, in his report for the session 1884-85, states that some time since he suggested to Earl Spencer the necessity of enlarging the scope of the teaching of the Medical School of the College, by establishing two new chairs—viz., Public Health and Human and Comparative Pathology; but the time was not thought favourable for making the proposed change. Since then the General Medical Council have included Human Pathology and Hygiene in the compulsory part of the curriculum, and they have also been adopted by the Royal University of Ireland. A diploma in Sanitary Science is also given in the same university; and it has consequently become absolutely necessary to make immediate provision for establishing these chairs. The President is also of opinion that lectureships on some special departments—viz., Diseases of the Eye and Ear,—and an endowment for the lectureship on Psychological Medicine, already established, should be provided. The Commission appointed last year to inquire into the Queen's Colleges, have recommended that the chair of Anatomy and Physiology should be divided, and a special chair of Physiology established, a change which it is hoped will soon be carried out. The total number of new students in the session 1883-84 was only 67, of whom 53 were matriculated, while last session the numbers were 99 and 86 respectively. The number of Royal University students entering the College has also largely increased. Among the many evil results of the agitation against the Queen's College, Cork, has been the postponement of the carrying out of the generous intention of Mr. W. H. Crawford to increase the College endowment by the erection of houses for the literary and scientific professors. The President refers to this, and trusts that the Government may be able to devise some means for putting an end to the hostility to the College.

JERVIS STREET HOSPITAL.

This hospital, which has been rebuilt at a cost of some thirty thousand pounds, will be opened for the reception of patients on the 29th inst. The new building has a frontage of 167 feet by 100 in height. The wards are situated on the ground floor and three storeys above; the basement storey, 13 feet high, affords accommodation for all dispensary purposes, with waiting-rooms, lavatories, &c. In the main building there are four wards, each 145 feet by 30, and there are two wings, each covering an area of about 600 feet. At each wing of the building staircases are provided with lavatories, baths, and latrines for each storey, with a hydraulic lift. The roof has an area of 160 feet by 35, is surrounded by a parapet wall relieved by occasional embrasures, and can thus be used by convalescent patients in fine weather; while between the north and south rear wings, there will on each floor be an enclosed corridor, which will afford room for exercise by patients. The entire area covered by the new building is 12,000 square feet, and there is accommodation for about 150 patients.

Professor Edward Hamilton will deliver the introductory address for the session 1885-6 at the Medical School of the Royal College of Surgeons on the 26th inst.

PARIS.

(*From our Paris Correspondent.*)

THE WEARING OF THE BEARD IN THE FRENCH ARMY.

IT is in contemplation to allow the officers and soldiers of the French army to wear beards. This is just as it should be, for it is inconceivable that a man should be deprived of this very comfortable and ornamental appendage merely to satisfy the caprice of a military chief. Various arguments for and against the wearing of the beard and moustache have been adduced from time to time; but those in favour of it will certainly outweigh those against it, not the least of which is that in the French army it will realise a saving of 600,000 francs, setting aside the time that is taken up with shaving, which is worthy of consideration, particularly in time of war. There are not a few opponents in the army to the wearing of the beard. The Minister of War has therefore considered it necessary to have the opinion of the general officers on the subject, and the reports of the latter are to be forwarded to his office before November 1st.

THE CONCOURS.

The annual Concours for the Internat of Hospitals does not always pass off in the most quiet way, but this year the opening, which took place on Wednesday last, was much more tumultuous than usual. In the first place, the candidates vociferously protested against the admission of women to the Internat. The next pretext was that one of the examiners had divulged the subjects for examination to some of his own externes, and in a letter addressed by some of the students to the Director of Public Assistance, the name of the accused gentleman was given. The members of the board forwarded a protest against this accusation, but before doing so M. Pozzi, the president of the examining board, read out the letter, which was signed by all the members; and when he arrived at the name in question, the shouting became so intense that the president's voice was overpowered, and finding that the students, numbering 1500, and who occupied the amphitheatre as spectators, could not be brought to reason, the president closed the meeting, and the matter of complaint has been referred to the Director of Public Assistance. This functionary has caused a notice to be posted at all the hospitals that the concours is deferred until further orders.

Paris, Oct. 14th.

ANCOATS HOSPITAL, MANCHESTER.—Mr. James Jardine has announced his intention of providing and permanently endowing twelve additional beds. This will increase the available number of beds to about thirty-five. The committee appeal to the public to follow this excellent example, so that the wards of the hospital, calculated to hold about fifty beds, may be utilised to their fullest extent for the benefit of the enormous population of the surrounding neighbourhood.

ROYAL COLLEGE OF SURGEONS.

AT a quarterly meeting of the Council, held on Thursday last, the minutes of the last meeting were read and confirmed. A motion of condolence with Mrs. Gay on the death of her husband, the late Mr. John Gay, F.R.C.S., was passed. The report of the Committee of Management on the letter from Mr. T. More Madden was read, and their recommendation adopted—viz., "That it be recommended to the two Colleges that Mr. Madden be informed, in reply to his communication, that the Colleges see no reason for altering their regulations by adding the Children's Hospital, Dublin, to the institutions at present recognised by them."

In pursuance of the provisions of the scheme of the Examining Board, by which one representative from each College is required to retire annually from the Committee of Management, the representative from the College of Surgeons, Mr. W. S. Savory, retired, but being eligible for re-election, was reappointed. Mr. J. Hutchinson was re-elected on the Court of Examiners. Sir James Paget accepted the invitation to sit for his bust.

A report was submitted, approved, and adopted, and directed to be presented to the meeting of Fellows and Members to be held on Oct. 29th, at 3 P.M. precisely. (This report can be had on application after the 17th inst.) The Council invite the Fellows and Members to make, in the form of resolutions, any recommendations or suggestions, as expressions of their opinions, on any of the matters comprised in the report from the Council. We may remark that it would probably expedite business at that meeting if the secretary of the College were furnished beforehand with copies of any resolutions proposed to be put to the meeting.

The President announced that he had selected Mr. John Wood as Bradshawe Lecturer, the lecture to be delivered at a date to be fixed.

A letter was read from Messrs. Dundas and Wilson, solicitors, Edinburgh, announcing that the sum of £1000 had been left by the late Mr. J. Moncrieff Arnott, the interest from which, subject to the life of his daughter, would be applied annually to the museum and the lectures connected therewith.

Mr. Jonathan Hutchinson proposed and Sir James Paget seconded the following resolution, which was carried unanimously:—"That a committee be appointed to consider the practicability of adding a wing to the museum of the College, to have for its especial (but not exclusive) object the display of casts, photographs, drawings, &c., illustrating the results of diseases and injuries in the living subject." The following were elected members of the committee:—Sir James Paget, Sir Joseph Lister, and Messrs. J. Marshall, Lund, Hutchinson, Hulke, and Durham, together with the President and Vice-Presidents.

Obituary.

WILLIAM DRUITT, F.R.C.S. (EXAM.)

MR. WILLIAM DRUITT, J.P. for the county of Dorset, whose death on September 27th, apparently of angina pectoris, we announced on the 3rd inst., was born in the year 1820, and was the youngest son of Robert Druitt, surgeon, of Wimborne Minster, and his wife Jane, daughter of Dr. Mayo, head-master of Queen Elizabeth's Grammar School, in that town. The families of Druitt and Mayo have been honourably associated with Wimborne, its minster and grammar school, for considerably more than 100 years; and it was therefore natural that William Druitt should receive his early education at that school. Though deprived, by his father's early death, of the benefits of paternal care and assistance, William Druitt had the good fortune to have a mother whose sound intelligence, energy and high principles, enabled her to educate and start in the world a family which can reckon among its members the late Dr. Robert Druitt, F.R.C.P., F.R.C.S., author of the well-known Handbook on Surgery; Mr. James Druitt, of Christchurch, a solicitor of high repute; and the Venerable Thomas Druitt, Archdeacon of Maneroo, Australia. On leaving Wimborne School, William

Druitt commenced the study of his profession under the able auspices of his maternal uncle, Mr. Charles Mayo, who at that time was held in well-deserved estimation as one of the surgeons to Winchester Hospital; and it was mainly to the admirable training he received at Winchester and the large experience he gained there from the many accidents occurring during the construction of the London and South-Western Railway that he owed the diagnostic and operative skill which enabled him to take and maintain the high professional position he held so long. From Winchester he went to St. George's Hospital; and, having obtained the diploma of M.R.C.S. at the earliest possible age, he started in practice in his native town. Here he rapidly acquired the confidence and respect of a large *clientèle;* and it is a proof of his indomitable energy and determination that he obtained the diploma of F.R.C.S. in 1849, at a time when he was already fully occupied with the cares and responsibilities of a rapidly-increasing general practice. He was among the number of those who obtained this diploma shortly after the institution of the examination; and he was in the habit of mentioning that among those who passed on the same day were Mr. Henry Smith, Professor of Surgery at King's College, and Mr. Wiblin, of Southampton. After a long and successful career, he was compelled through failing health to retire from active practice in the year 1876; but he never lost his interest in his profession, being ever ready to extend to former patients and his younger professional brethren the great benefit of his large experience and acute perceptions. As a member of the Board of Guardians his professional knowledge was ever at the service of his fellow-townsmen; while his accurate business habits and unswerving rectitude, coupled with his kindly disposition and intimate acquaintance with the wants of the poor, singled him out as a specially desirable trustee and distributor of the many local charities. Two years ago he was prevailed upon to accept the office of Justice of the Peace for the county of Dorset, a position which he filled with dignity and impartiality. He was through life a staunch Conservative and churchman; but, by the exercise of the most admirable tact and courtesy, he managed to secure and retain the affection and respect of many of the most determined holders of opposite opinions. Modest and unassuming, he never gave offence; but, by his liberality, kindness and uprightness, he made a host of friends among all classes, and of him it may truly be said, "Multis ille bonis flebilis occidit."

FREDERICK WM. WARREN, F.R.C.S.I.

WITH sincere regret the many friends of this gentleman heard of his untimely death, the sad event having occurred at his residence in Harcourt-street, Dublin, on last Sunday. The deceased succumbed, after barely a week's illness, from enteric fever—at the early age of thirty-three years. Mr. Warren was a Master of Arts of the University of Dublin, and a Fellow of the Royal College of Surgeons of Ireland; surgeon to the Adelaide Hospital, and a Demonstrator of Anatomy in the College of Surgeons Medical School. As a private teacher he achieved considerable success, and was much liked by the students, and also by his colleagues and professional friends, for his skill and frank genial disposition. He leaves a widow and three children and a host of friends to mourn his premature decease.

SAMUEL SPRATLY, M.D., M.R.C.S., L.S.A.

IT is with regret that we have to announce the death of Dr. Spratly, which took place at his residence, Rock Ferry, near Birkenhead, early on the morning of the 6th inst. The deceased was born in London on Feb. 14th, 1833, and brought up at Ramsgate. As he approached manhood he was entered as a pupil at King's College, London, of which in due course he became an Associate. His medical studies were also pursued at King's College, and in 1856 he qualified for practice, taking the College and Hall. Shortly afterwards he was appointed resident surgeon to the Birmingham General Dispensary and teacher of vaccination. About this time he invented a vaccination lancet which still goes by his name. On leaving Birmingham, Dr. Spratly came to Birkenhead and commenced practice. Here he met the late Dr. Roper, of Rock Ferry, whose partner and successor he became. In 1862 Dr. Spratly graduated at St. Andrews as M.D. For many years he conducted a successful practice at Rock Ferry, latterly in conjunction with Dr. Newington, his brother-in-law. He was surgeon to the *Akbar* Reformatory Ship and the *Indefatigable* Training Ship, in the Mersey. For ten years he was surgeon to the Birkenhead Borough Hospital, a post he resigned, owing to failing health, in the summer of last year. He was a town councillor of Birkenhead, and a member of the Health, Baths, and Parks Committee.

Dr. Spratly was an able surgeon and a sound general practitioner. He was hospitable, kindly in manner, and popular with his patients. For two years he suffered much from ill-health, his heart and kidneys being affected. Latterly he became emaciated and weak, and it was obvious to his friends that the struggle could not be long maintained. About midnight on Monday he had an epileptiform seizure, and this recurred frequently till five minutes to eight A.M., when he passed away. Dr. Spratly was a widower, and leaves one son, aged eighteen years. The flag at the Town Hall was hoisted half-mast high in token of respect for the deceased.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their Primary Examinations in Physiology only at a meeting of the Board of Examiners on the 8th inst., and when eligible will be admitted to the Pass Examination:—

Alfred E. Vaughan and Thomas A. Murray, Owens College; D. W. Liebstein and William S. Routledge, University College; Bruce Hamilton and Henry Hamilton, Bristol School of Medicine; John H. Clayton, John E. Foster, W. M. Joyce, and Matthew H. Vinrace, Birmingham; J. E. Syme, Edgar N. Darwent, and Thomas Walcot, University of Edinburgh; Walter Mitchell, Sheffield; Rhodes Hebblethwaite, Leeds School of Medicine; James Magauran, Dublin; Frentz W. Guiselin and Francis A. Brooks, St. Mary's Hospital; J. F. G. Alexandre, Bâle; Albert E. Tebb, G. W. A. Mitchell, and Hubert Joslem, Guy's Hospital; C. Mattei, Malta and St. Thomas's Hospital; Frank Heasman, Sidney H. Badcock, and John More, St. Bartholomew's Hospital.

Passed on the 9th inst.:—

ANATOMY AND PHYSIOLOGY.—Norman Allen, Harold H. Hawley, and J. Rennie Logan, Toronto; Samuel L. Melville, Liverpool; Robert N Fraser, Kingston, Canada; James W. H. Stell, Glasgow; Ernest H. Gibbon, Newcastle; Horatio Edward Rawlings, Birmingham; William Roberts, Bristol Medical School; Alfred B. Jones, Middlesex Hospital; Frederick J. Nisbet, Guy's Hospital; Frank D. Bennett, St. Bartholomew's Hospital.

ANATOMY ONLY.—Edward Foxton, Kingston, Canada; William H. Robinson, St. Thomas's Hospital; Frederic C. Wood, London Hospital; James H. Harrison, University College; Henry J. Holman, Guy's Hospital.

PHYSIOLOGY ONLY.—Kenneth T. Stewart, Edinburgh University; Arthur J. Lambert, Leeds School of Medicine; George S. Pope, Fredk. P. Moles, and Joseph F. Wright, Manchester; Frederick W. Walker, Edinburgh and Aberdeen; John C. Dickinson and John P. De Buriatte, London Hospital; Alexander T. Harrison, Guy's Hospital.

Passed on the 12th inst.:—

ANATOMY AND PHYSIOLOGY.—Stephen Joseph Daly and Kenneth McLaren, St. Bartholomew's Hospital; Christopher Robertson, St. Thomas's Hospital; Harold D. B. Castle, King's College; Theophilus W. Mead, St. George's Hospital; Robert H. Gilpin, Middlesex Hospital; George G. Borrett, London Hospital; J. M. C. Cole, Belfast; James Pearson and William Mitchell Cotton, University College.

ANATOMY ONLY.—John Henry Austin, St. George's Hospital; Lewis St. John Reilly, London Hospital; Reginald Stillwell Freeland, Guy's Hospital; William Louis Abbott, Pennsylvania.

PHYSIOLOGY ONLY.—R. G. Pollock, Frederic G. Vicars, and A. L. Devenish-Meares, Guy's Hospital; Martin A. Kirton, London Hospital; Stafford L. Archer, King's College; Charles H. Stevens, University College.

Passed on the 13th inst.:—

ANATOMY ONLY.—Thomas A. Quirk, Melbourne University; Edmund Capper, Benjamin P. Johnson, Locke Macdona, and T. Eyton-Jones, Liverpool; J. D. O'Sullivan, Dublin; John Fullard, Birmingham; J. N. Whitehead and Herbert Burland, Manchester; John Wilkins and William F. Fisher, London Hospital; Herbert L. Hudson, Sheffield; Arthur C. Elliman and John W. Emmet, Guy's Hospital; Frank Brightman and Charles H. Clayton, University College; Thomas S. P. Sparrow, King's College.

PHYSIOLOGY ONLY.—Alfred W. Waller and Henry B. Shepherd, St. Thomas's Hospital; W. Watkins, Francis H. Lowe, and A. E. D. R. Peters, St. Bartholomew's Hospital; George Barton and F. B. H. Caudwell, Charing-cross Hospital; A. B. G. Roberts, St. Mary's Hospital; James D. Brown and O. W. Andrews, St. George's Hospital; William C. Burt, C. R. H. Buckley, George J. Cressy, and Hugh F. Knyvett, Guy's Hospital; Wm. W. Craig and Anthony

Gornez, University College; George E. Price and Mark B. Dumaresq, London Hospital.

The Library of the College will be closed on Tuesday, the 20th inst., for the purposes of the Pass Examination for the Membership.

UNIVERSITY OF CAMBRIDGE.—The following gentlemen have passed the examination in Sanitary Science:—

John Edwin Cooney, London, L.F.P.Edin.; Benjamin Evers, Indian Medical Department, Bengal, L.R.C.S.; J. Fraser Ewan, M.B.Lond., M.S.Edin.; Henry Arthur Fotherby, M.R.C.S., L.R.C.P.Lond.; Charles Gross, L.R.C.P.Lond.; John C. Jackson, L.R.C.P.Lond.; Norman Macmillard MacLehose, M.B., M.S.Glas.; Bonnor Harris Mumby, M.D., M.S.Aber.; Alexander Milne Robertson, M.D., M.S.Edin.; John Christie McVail, M.D., M.S. St. And.

ROYAL UNIVERSITY OF IRELAND.—The following have passed the Second Examination in Medicine of this University:—

UPPER PASS DIVISION.—*David C. Campbell, James B. Coleman, *Edward Corcoran, *Richard R. Davidson, Robert J. Duffin, Thomas E. Dunne, *Edward R. Hennessy, *Wm. Kelleher, *John McGennis, *Robert Nelson, Francis J. Perrott, *Simon Ryan, Joseph Stewart, *William Weatherup.

* Will be admitted to the further Examination for Honours.

PASS.—Robert Bryans, Edward R. Crofton, John M. J. Downer, John J. Egan, William M. Elliott, William E. Finny, John W. Fogarty, John J. Gordon, John J. Griffin, Walter M. Hamilton, Thomas S. Hogg, James Hupter, William Kerr, William M. Killen, Thomas J. Lenehan, William McCord, Peter McKenna, Henry L. MacKissack, Edmond J. McWeeney, Charles H. Murray, Patrick J. O'Brien, Lawrence O'Clery, M. O'Halloran, William O'Mears, John Pettigrew, Edmond Ryan, Martin Semple.

Passed in subjects necessary to complete the Second Examination in Medicine:—

Richard C. McCullagh.

SOCIETY OF APOTHECARIES.—The following gentleman passed his examination in the Science and Practice of Medicine, and received a certificate to practise, on the 8th inst.:—

Gooddy, Edward Samuel, M.R.C.S., Kennington-road.

On the same day the following gentleman passed his examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received a certificate to practise:—

Ward, John Oddy, Kippax, near Leeds.

The following gentlemen also on the same day passed the Primary Professional Examination:—

James George Burgess, Guy's Hospital; Henry Scarborough Cooper Westminster Hospital; Henry Tottenham West, Belfast Hospital.

DR. O'REILLY of Trim has been placed on the Commission of the Peace for County Meath.

THE salary of Dr. Beattie, medical officer of the Stepney Union, has been raised from £350 to £400 per annum.

THE memorial of the late Mr. R. B. Mackie, M.P., is to take the form of an extension of the Wakefield Convalescent Home.

THE CHOLERA IN SPAIN.—The Lord Mayor has received through Mr. I. M. Marks a sum of £255, subscribed by members of the Stock Exchange for the Spanish cholera fund, which has now reached a total of £3800.

CITY OF DUBLIN HOSPITAL.—As a result of the recent amateur performances at the Queen's Theatre in aid of this hospital, a sum of £120 has been placed to its credit; and the institution has also received 50 guineas, the proceeds of a cricket match lately played to benefit its funds.

AT the quarterly meeting of the directors of the Naval Medical Supplemental Fund held on the 13th inst., Sir W. N. E. Smart, K.C.B., M.D., Inspector-General, in the chair, the sum of £77 was distributed among the several applicants.

PORTUGUESE DOCTORS IN SPAIN.—It has been asserted that the Spanish Government has rescinded the permission given to Portuguese medical men to practise in Spain; no notice of the kind, however, has appeared in the official gazette.

UNIVERSITY OF ABERDEEN.—On the 9th inst. the University Court appointed the following gentlemen to be Extra-professorial Examiners for Graduation in Medicine for one year:—Dr. John Alexander, Glasgow; Dr. J. Macdonald Brown, Edinburgh; Dr. Alfred H. Carter, Birmingham; Dr. J. A. McWilliam, London; Dr. A. D. Leith Napier, Dunbar; and Dr. Francis Warner, London.

LONDON TEMPERANCE HOSPITAL.—On the 9th inst. the Bishop of London performed the ceremony of opening a new wing to this hospital, by which four wards, comprising a total of seventy beds, have been added to the institution.

THE Queen has graciously accepted the dedication of the "History of Queen Charlotte's Lying-in Hospital," of which the secretary, Mr. Thomas Ryan, is the author. The work, which will shortly be issued, is to be published by subscription, and sold for the benefit of the charity, which is greatly in need of funds.

GUY'S HOSPITAL.—The first meeting of the Pupils' Physical Society was held on Thursday evening, Oct. 8th, Dr. Wilks, Honorary President, in the chair. After the proceedings of the evening, a massive silver loving-cup and an address were presented to Dr. Wilks by the present and immediate past students of the hospital.

VACCINATION OFFICERS' ASSOCIATION.—A meeting of members of this Association will be held to-day (Saturday), at 2.30 P.M., at Charing-cross Hospital Medical School, Chandos-street, Strand. After the election of members and honorary members, some observations will be made on certificates postponing vaccination.

SANITATION IN RUSSIA.—In St. Petersburg during last year 14,874 houses and 9776 institutions of various kinds were inspected by the police and police surgeons and 239 persons fined for disregard of hygienic regulations, reaching a total sum of £941; twenty-three institutions were also ordered to be closed.

ROYAL MEDICAL BENEVOLENT COLLEGE.—The Council are about to nominate the orphan daughter of a medical man to a scholarship giving free education and maintenance at the school of St. Anne's Society. Immediate application should be made to the Secretary of the College, at the office in Soho-square.

NATIONAL DENTAL HOSPITAL.—In consequence of the success of the first series of dances held last year at the Marlborough Rooms, Regent-street, in aid of the funds of this hospital, it has been determined to hold a second series of four dances at the same rooms on Oct. 28th, Nov. 25th, Dec. 16th, and on Jan. 25th, 1886.

AMERICAN papers report a tragic result of professional rivalry at Bloomington, Illinois. It appears that a Dr. H. L. Harris set up in practice at the above-named town, to the detriment of a Dr. G. W. Barton, who was already established there. A quarrel ensued, and Harris fired at Barton and killed him.

SANITARY ASSURANCE ASSOCIATION.—At the monthly meeting of the Council of this Association on Monday last, Sir J. Fayrer, K.C.S.I., F.R.S., in the chair, it was resolved, on the motion of Mr. Mark H. Judge, A.R.I.B.A., seconded by Mr. Andrew Stirling, to arrange for another series of five lectures on sanitary subjects during the coming winter. Professor Roger Smith, F.R.I.B.A., will deliver one of the series.

ADDENBROOKE'S HOSPITAL.—At the quarterly meeting of the governors of this hospital, it was announced that the late Master of Jesus College, a few days before his death had presented to the hospital a portrait of Bishop Turton, who was a great benefactor to that institution, bequeathing to the hospital at his death a twelfth part of his residuary estate. The portrait will be placed in the board-room of the hospital.

SEAMEN'S HOSPITAL.—At the quarterly general court of the governors of the Seamen's Hospital Society, held on Oct. 9th, the medical officer reported the hospital to be entirely free from erysipelas and similar diseases. The secretary said that the number of patients, both in and out, was slightly in excess of those during the same quarter in 1884, and that, amongst other countries, 34 came from Ireland, 22 from Scotland, 6 from the Channel Islands, 7 from Brazil, 10 from Denmark, 20 from Germany, 34 from Norway, 4 from Nova Scotia, 24 from Sweden, 5 from the United States, and 6 from the West Indies, whilst 1 had been born at sea. The new chapel is to be opened to-day (Friday), when a dedication service will be conducted by the Bishop of Rochester.

CHESTER MEDICAL SOCIETY.—The members of the above Society held their annual dinner on the 8th inst. at the Freemasons' Hall, Dr. W. M. Dobie (President) in the chair. The usual loyal toasts having been duly honoured, Dr. Waters proposed "The Bishop and Clergy of the Diocese," which was responded to by the Rev. H. Grantham. The Vice-President, Dr. Weaver, next proposed "The Army, Navy, and Auxiliary Forces," to which Surgeon-Major Tomlinson and the surgeons attached to the Volunteer regiments in the district replied. The toast of "The Chester Medical Society" was proposed by the coroner for West Cheshire, Mr. Henry Churton, and duly acknowledged by the President. A very pleasant evening was spent.

WOLVERHAMPTON AND DISTRICT MEDICAL SOCIETY.—The annual meeting of this Society was held on Oct. 8th, at Wolverhampton, Mr. Newnham in the chair. The report of the previous session was read, and was considered to be satisfactory. The following is a list of the papers which have been read: Dr. Ransome, of Manchester, on Chest Mapping and Measuring; Dr. Totherick, on cases of Illness brought on by waiting at Railway Stations; Mr. V. Jackson, on a Cheap and Ready Way of treating Club-foot; Mr. A. E. Chesshire, on the Value of Cocaine as a Local Anæsthetic; Dr. S. J. Smith, on Puerperal Fever; Mr. Crockett, on Puerperal Fever; Mr. Manley, on Climacteric Disorder. Twelve cases and sixteen morbid specimens have also been exhibited. The financial state of the Society is reported to be satisfactory.

SCHOLARSHIPS. — At *St. Bartholomew's* Hospital Medical College, the Open Scholarships in Science of £130 for candidates under twenty-five years of age have been awarded to Mr. J. Kerr, B.A., and Mr. Jones, B.A., both of St. John's College, Cambridge (equal); and that of £130, for candidates under twenty years of age, to Mr. A. Stevens. The Jeaffreson Exhibition of £50 has been awarded to Mr. Williamson. At *University College*, the Entrance Exhibition, of the value of £100, has been awarded to Mr. T. L. Pennell; that of the value of £60 to Mr. L. B. Mitra; and that of the value of £40 to Mr. J. J. Macnamara. At *St. Thomas's*, the Open Scholarships in Natural Science have been awarded to Mr. A. F. Stabb (£100) and Mr. S. G. Toller (£60); Messrs. C. R. Box, A. C. Lankester, T. A. Dukes, and M. C. Clutterbuck obtained the number of marks qualifying for a Scholarship.

METROPOLITAN ASYLUMS BOARD.—The usual meeting of this Board was held on the 10th inst. at Spring-gardens, Mr. E. H. Galsworthy presiding. The returns respecting small-pox in the metropolis showed that the epidemic, which had long prevailed, was suddenly dying out. During the fortnight there had been received in all thirty-six cases, as against seventy-five in the previous fortnight. Of these, five had been received in the South-Eastern Asylum, and thirty-one on the hospital ships. During the fortnight six had died, sixty-six had been discharged, and 130 remained under treatment, of whom 129 were on the ships and one was in the South-Eastern Asylum. The number left a fortnight ago under treatment was 155. Sir E. H. Currie stated that the small-pox having now shown itself to be spent, the question arose whether the managers should proceed with the proposed buildings on the site at Darenth. It was resolved "that it should be referred to the General Purposes Committee to consider and report as to the nature, extent, disposition, and qualifications of the accommodation which, in the opinion of the committee, should be provided for the reception of small-pox patients, and that, pending the receipt of the report of the committee, the consideration of the plans for the proposed buildings at Darenth should be adjourned." It was also resolved that the Local Government Board be urged to no longer withhold their sanction to the temporary closing of the small-pox isolation wards at the North-Western, South-Western, and Western Hospitals, keeping open those at the South-Eastern and Eastern Hospitals. The returns of the fever asylums showed that during the fortnight fever had steadily increased, eighty-two cases having been received, as against seventy-four in the previous period. Eleven had died and sixty-seven had been discharged, as against fifty-seven in the previous period, leaving 321 cases under treatment, an increase of four upon the number left at the last period. The cases under treatment include 272 of scarlet fever, five of typhus (in the south-eastern districts), thirty-one of enteric, and ten of other diseases of a febrile character.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

ANNACKER, ERNEST, M.R.C.S., L.R.C.P.Lond., has been appointed Resident Medical Officer to St. Mary's Hospital, Manchester, vice F. Bennet, M.B.Lond., B.Sc., M.R.C.S., resigned.

ANNESS, F. R., M.R.C.S., L.R.C.P., has been appointed Resident Surgeon to the Seaman's Infirmary, Ramsgate, and Visiting Surgeon to the Ramsgate and St. Lawrence Royal Dispensary, vice G. H. Doudney, M.B. &c., resigned.

BARRON, ALEXANDER, M.B.Lond., has been appointed Curator of the Pathological Museum, University College, Liverpool, vice F. T. Paul, F.R.C.S., resigned; also Assistant to the Professor of Pathology, University College, Liverpool; also Medical Tutor to the Royal Infirmary, Liverpool, vice H. Hyla Greves, M.D., resigned.

BRODIE, WILLIAM HAIG, M.B., C.M.Ed., has been reappointed Medical Officer for the North and the Seale District of the Farnham Union.

CLEMENT, R. J., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Resident Clinical Assistant at St. Luke's Hospital.

COLLIER, JOSEPH, M.B., B.S.Lond., F.R.C.S.Eng., has been appointed Resident Surgical Officer to the Manchester Royal Infirmary, vice Mr. H. W. Pigeon, resigned.

DICKINSON, GEORGE DIXON, M.B., C.M.Ed., M.R.C.S., has been appointed Health Officer for the Borough of Flemington and Kensington, Victoria.

DUNN, LOUIS ALBERT, M.B., B.S.Lond., F.R.C.S.Eng., L.S.A.Lond., has been appointed Demonstrator of Anatomy at Guy's Hospital.

NEATE, CHARLES P. WETHERELL, M.R.C.P., F.R.C.S.Ed., M.R.C.S., has been appointed Medical Officer for the Stilton District of the Peterborough Union, vice Thelwall.

NEWMARCH, BERNARD JAMES, L.R.C.P.Lond., M.R.C.S., has been appointed Government Medical Officer and Vaccinator for the District of Bowral, New South Wales.

NUGENT, G. P. L'ESTRANGE, M.B., B.Ch.Dub., has been appointed Physician to the House of Industry, Dublin, vice MacDowel, deceased.

PYBUS, JOHN ALFRED, L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Government Medical Officer and Vaccinator for the District of Tweed River, New South Wales.

SLOMAN, HERBERT, L.R.C.P.Lond., M.R.C.S., has been appointed Medical Officer for the Southern District of the Farnham Union, vice S. G. Sloman.

STAPLE, JAMES D., L.S.A.Lond., has been appointed Resident Clinical Assistant at St. Luke's Hospital.

TARGETT, JAMES HENRY, M.B.Lond., M.R.C.S., has been appointed Surgical Registrar at Guy's Hospital, vice Dunn, resigned.

WASHBOURN, WILLIAM, M.R.C.S., has been appointed Medical Officer for the First District of the Gloucester Union, vice Carter.

WOODBURN-HERON, ALEX., L.F.P.S.Glas., L.M.Glas., L.S.A.Lond., L.R.C.P.Ed., & L.M.Ed., has been appointed Government Assistant Colonial Surgeon to the Gold Coast Colony, Africa.

Births, Marriages, and Deaths.

BIRTHS.

BUSHE.—At Chanbuttia, Kumaon, India, the wife of Surgeon-Major Cecil J. L. Bushe, M.B., Medical Staff, prematurely, of a daughter (stillborn).

FIELD.—On the 10th inst., at Belmont, Bath, the wife of Ernest Field, M.D., of a son.

RAPER.—On the 7th inst., at Great Wakering, Essex, the wife of W. A. Raper, M.D., of a son.

SELOUS.—On the 7th inst., at Zurich, the wife of Dr. E. Selous, Brigade Surgeon (retired) Indian Medical Service, of a daughter.

THURLAND.—On the 10th inst., at Wilmington-square, W.C., the wife of F. E. Thurland, M.R.C.S., of a daughter.

MARRIAGE.

ROBINS—MCDONALD.—On the 17th ult., at St. Saviour's, Paddington, George Norman Robins, M.R.C.S., L.R.C.P.Ed., of Rippingale, Bourne, to Flora Frances, only child of the late Dr. Charles P. McDonald.

DEATHS.

CLARKE.—On the 2nd inst., at 2, York-buildings, Clifton, Bristol, William Michell Clarke, M.R.C.S., L.S.A.Lond., aged 56.

HAMILTON.—On the 4th inst., at Oakfield, Torquay, William Hamilton, M.D., formerly of Marlton, Co. Wicklow, Ireland, aged 88.

LAW.—On the 10th inst., at Woburn-place, Russell-square, Augustus Law, M.R.C.S., late Medical Officer in the Peninsular and Oriental Company's Service, aged 60.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, Oct. 15th, 1885.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radiation in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Oct. 9	29·36	W.	47	45	83	55	45	·10	Cloudy
,, 10	28·95	E.	46	46	65	52	46	·32	Raining
,, 11	29·54	E.	47	43	70	50	43	·04	Hazy
,, 12	29·68	N.W.	41	39	69	51	35	·03	Hazy
,, 13	29·84	N.W.	43	39	73	49	39	...	Cloudy
,, 14	29·77	N.W.	44	42	62	49	42	·11	Raining
,, 15	30·12	S.E.	49	47	...	55	42	·13	Hazy

Medical Diary for the ensuing Week.

Monday, October 19.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
ST. MARK'S HOSPITAL.—Operations, 2 P.M., and on Tuesdays at the same hour.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M. Also on Thursdays at 2 P.M.
MEDICAL SOCIETY OF LONDON.—8.30 P.M. The President (Dr. Ord) will deliver an address on opening the Session.—Dr. W. H. Broadbent: Examples of Syphilitic Disease of the Brain and Nervous System.

Tuesday, October 20.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.
PATHOLOGICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Dickinson: Malignant Tumour connected with Cranial Bones.—Dr. Payne: Bacilli from a case of Rhino Scleroma.—Dr. Hale White: Ulceration of Gall-stones into Stomach causing Pyloric Obstruction.—Dr. Sainsbury: Tumour from the Base of the Brain containing Skin.—Mr. Sheild: Cancer of the Bladder.—Dr. Gulliver: Multiple Hydatids of the Brain.—Mr. Barker: Primary Lympho-sarcoma of Tonsil.—Mr. Mansell Moullin: Bladder and Rectum six months after Littré's Operation for Imperforate Anus.—Mr. Lockwood: Malformation of the Heart.—Mr. Eve: Two cases of Sarcoma of the Tongue.—Mr. Alban Doran: Broad Ligament Cyst.—Dr. Ledlard: (1) Black Tongue (card); (2) Primary Sarcoma of Femoral Glands (card); (3) Intercondyloid Fracture of Femur (card).—Mr. Shattock: Congenital Absence of Fibula (card).—Dr. Bruce of Edinburgh will exhibit some Pathological Specimens of Fine Sections of Entire Viscera.

Wednesday, October 21.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays at 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department: 9.30 A.M., on Tuesdays and Fridays.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department: 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.

Thursday, October 22.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Friday, October 23.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
CLINICAL SOCIETY OF LONDON.—8.30 P.M. Mr. Mayo Robson: Two cases of Cholecystotomy, with remarks.—Dr. Edward Seaton: The Characteristic Symptoms of a Febrile Epidemic Illness at a School.—Dr. Samuel West: A case of Idiopathic Purulent Peritonitis in a Child of Ten, with autopsy.—Mr. Walter Rivington: Two cases of Ligature of the External Iliac Artery for Femoral Aneurysm.

Saturday, October 24.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
MIDDLESEX HOSPITAL.—Operations, 2 P.M.

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

THE ORGANISATION AND GOVERNMENT OF THE PROFESSION.

Zeno of Elea.—Our correspondent's communication is too long for our pages. It would make a pamphlet, and might be published in that form. He alleges that the profession is not complete within itself, that it is ruled and interfered with by outsiders; and complains that, except the bestowal of the Fellowship by the College of Physicians, the profession itself bestows no honours on its members. The College of Physicians is the one body in the profession which excites our correspondent's admiration; it stands out like a huge pillar which has always supported the honour and dignity of the profession. He proposes that the College of Physicians should make all medical appointments in our hospitals, and the College of Surgeons all surgical appointments. Like most other people, our correspondent thinks that the Medical Council, constructed as it is, must ever remain a useless body. He lauds the services of the British Medical Association, and thinks its branches might be made into districts, which might send representatives to the General Medical Council; the present Council might remain as a sort of Upper House, the president to be allowed a salary out of the accumulating funds and a seat in the House of Lords! Our correspondent would empower the Royal Colleges to grant the title of "Doctor" to all, but not that of "M.D." We fear several of these notions are somewhat impracticable, and others would be rejected by the profession; but their very originality entitles them to this notice.

Riviera.—We believe a qualified and registered medical man can practise at Nice without passing an examination; but the consent of the French Government must be previously obtained.

Mr. Edward B. Reckitt.—Yes.

"THE HABIT OF MORPHIA-TAKING."

To the Editor of THE LANCET.

SIR,—Your correspondent, "H. C.," asks for hints as to the treatment of the morphia habit, and I am happy to be able to give him some.

The principles of the treatment are few and simple, but must be rigidly adhered to. The patient must give up taking morphia at once. He must lie in the horizontal position for a week or ten days; must be watched night and day until he is "out of the wood"; should be fed with light food and drinks at frequent intervals; full doses (thirty to sixty grains) of potassium or sodium bromide should be administered if the patient is sleepless, vomiting, or "jumpy," and he should have a course of medical rubbing, tonic douches, and faradism to complete his cure.

The "tapering off" plan is a fraud. It causes the patient fearful suffering, and generally ends in disappointment and a return to the evil habit. The mental and moral effect of giving up the morphia at once is immense. I have treated many patients on the above plan with signal success, some taking as much as fourteen and sixteen grains a day.

I am, Sir, yours truly,

Ben Rhydding, Oct. 10th, 1885. JOHN FLETCHER LITTLE.

M.D. R.U.I.—We believe that the restriction referred to was abolished by the existing regulations.

Dr. Robert Saundby.—We regret we cannot exchange.

THE BRADLEY FUND.

To the Editor of THE LANCET.

SIR,—Will you kindly acknowledge the following subscriptions to the above fund?

I am, Sir, yours faithfully,

Eastwood House, Chesterfield, Oct. 14th, 1885. RICHARD JEFFREYS.

The Proprietors of the *Provincial Medical Journal*	£5	5	0
Mr. Edward Cock	2	2	0
Dr. W. H. Hooper	£1	1	0
Dr. E. Cresswell Baber	1	1	0
Anonymous	0	5	0

OZONE AND PNEUMONIA.

ON Dr. Draper's showing, the more ozone the atmosphere contains the more frequent is the occurrence of fatal pneumonia in man and animals. This is the pith or outcome of his investigations as Director of the New York Meteorological Observatory in Central Park. To rush to the conclusion that ozone is a "bad thing for us" is assuredly as premature as it is illogical. In the first place—and we speak simply on the facts before us,—the only assertion that is made is that the death-rate from pneumonia is higher in those years in which large amounts of ozone were noted. Such a statement is too sweeping to be of much value. Secondly, it is probable that the meteorological records only give information for a limited number of years past, and any conclusion drawn from a less series of years than, say, fifty would be liable to the inevitable error which is best phrased in the dictum, "figures can be made to prove anything." Thirdly, even if the phenomena should turn out to be real concomitant variations, it cannot be asserted that ozone is the cause of fatal pneumonias; for it would be necessary to show that excess of ozone was an antecedent, and the only one.

A Constant Visitor.—To carry out our correspondent's recommendation fully would involve a very serious outlay, which, we think, could hardly be justified in the present state of our knowledge on the subject. The classification of the cases must always be left to the discretion of the medical officer who is responsible for the treatment.

Chirurgeon.—It is not usual to advertise in the local papers for such a purpose, and the course would scarcely be likely to be advantageous. Arrangements of the kind are generally made through private friends or the medical journals.

A. F. is referred to our advertising columns.

ROYAL CORNWALL INFIRMARY.

To the Editor of THE LANCET.

SIR,—A matter of very considerable importance has occurred at Truro in connexion with the Royal Cornwall Infirmary—a most valued institution in that town, which has been established about seventy years, and has always had a large income from subscriptions from all parts of the county. It has always had, until a very recent period, a large staff of medical and surgical officers, mostly honorary, to whom the best thanks of the public and the governors of the infirmary are due. But the senior physician died about two years ago, and the remaining physician retired a few weeks since. Mr. Sharp, a leading surgeon at Truro, and one of the staff of the infirmary, advised that no physician should be appointed, and urged very strongly to that effect, stating that if a physician were appointed he should resign his post as honorary surgeon of the infirmary. The governors of the institution, however, felt that they had no alternative but to carry out the rule—viz., that there should be one or more physicians; and inasmuch as the governors were anxious if possible to retain the services of Mr. Sharp, the president waited upon him and asked that he should, as heretofore, give the infirmary the benefit of his long experience. Advertisements were inserted, and a selection—a unanimous one—made. Before the appointment was made known Dr. Williams was called in before the Board of Governors, and the chairman, in the name of the meeting, said there was one stipulation he had to make—viz., that before Dr. Williams was appointed it was essential they should know from him that he was prepared to attend to the out-patients as well as to the in-patients, which had not been the case for some years past by the physicians of the infirmary. Dr. Williams stated, in reply, that it had always been his custom to do so at Lynn, and he would be quite ready to do so still. He was then unanimously appointed, and it was again emphasised by the treasurer—a very old governor—that he was to prescribe for the out patients as well as the in-patients.

Immediately afterwards a new house-surgeon was appointed, also unanimously, and here began the friction and the trouble. The honorary physician is of course an unpaid officer, and is to all intents and purposes at the head of the medical and surgical staff of the infirmary. The house-surgeon is a paid officer, and therefore, I apprehend, subordinate to the honorary physicians and surgeons. It appears that the house committee, without consulting Dr. Williams, passed a resolution that the house-surgeon was to see the out-patients first, and select those he wished to prescribe for himself, handing over to the physician only such cases as he thought best, and also those who particularly wished to see the physician. This, I aver, no physician with any regard whatever for his position would for one moment accept. I should say that this resolution was passed in the absence of the physician, and without any consultation whatever with him on the subject. Dr. Williams naturally declined to accept this new rule made by a small body of the governors; whereas his appointment was made at the annual public meeting of the governors. This anomalous state of affairs brought forth the natural fruit. Friction arose between Dr. Williams and the house-surgeon, and the weekly board upheld the action of the latter. The consequence is, this most valued institution is without the services of a physician, and the out-patients (medical cases) at the present time are prescribed for by the house-surgeon only. It cannot be too plainly set forth that there was a distinct contract that the physician was to prescribe for the out-patients, and no physician, I aver, would consent to prescribe only for the patients which the house surgeon might think it desirable to hand over to the physician. Certainly, no gentleman would accept such a position. I respectfully submit that the governors cannot possibly expect Dr. Williams to abandon his original agreement; for if he does, as he will be to all intents and purposes acting under the house-surgeon, an inferior officer, instead of being the responsible officer at the head of the medical staff of the infirmary.

I have placed these few facts before you as one who has been for many years a well-wisher to the infirmary; and I respectfully ask you kindly from your long experience as a journalist whether you think the weekly board of the infirmary are justified in acting as they have done. I further point out that it is impossible for Dr. Williams ever to act under the direction of the paid house-surgeon; and the consequence is things are all "sixes and sevens"—a state of things which must result in very seriously injuring the status of the infirmary, the welfare of which ought to be of paramount importance to every governor and subscriber.

I am, Sir, yours faithfully,

October 7th, 1885. AN OLD GOVERNOR.

*** There can be no question that the weekly board did not act rightly towards the newly appointed physician in not informing him beforehand as to the contemplated change in the regulations for seeing the medical out-patients, or in not consulting him about it in the first instance on the appointment of the house-surgeon. Clearly, the latter's position is that of an assistant to the superior officer in whose charge the department was placed, and without whose cognisance no such radical change should have been made. Herein lies the whole grievance, and Dr. Williams deserves our sympathy for the position in which he is placed by the cavalier treatment he has received. We trust that steps will be taken to remedy the error which the board have made, and they would do well in future to leave the details of the working of medical departments in the hands of the medical staff. It may be added that in many London hospitals it is now customary for all applicants for out-patient relief to be first seen by a resident officer, who exercises his discretion in the selection of such cases as may require prolonged treatment at the hands of the physician or surgeon. The plan, *per se*, is not objectionable; it is the manner in which it has been enforced at the Royal Cornwall Infirmary that has placed Dr. Williams in a false position, and given him just ground for complaint.—ED. L.

TRIPLETS.

To the Editor of THE LANCET.

SIR,—A case of triple birth being of rather unusual occurrence, it may interest some of your readers to know the following particulars.

On Oct. 8th I attended Mrs. B——, who gave birth to three living male children. The first two presentations were footlings; the third a head. There was a single placenta, with three separate cords. A similar case of mine was inserted in your valuable journal in April, 1884. I have preserved the placenta, which, if it is of interest to anyone, I will forward on application. I am, Sir, yours obediently,

Old Kent-road, S.E., Oct. 6th, 1885. CHARLES F. HARPER.

PROPRIETARY MEDICINES IN AMERICA.

ACCORDING to the last United States census there are 563 establishments in that country devoted to the proprietary medicine business, employing 4015 operatives, with an aggregate investment of capital amounting to 10,620,000 dols., and the annual product is valued at 14,682,000 dols. The principal patrons of patent medicines in America are, it appears, persons of limited means, who cannot afford to consult physicians for their ailments, yet are not poor enough to avoid doctors' fees and the cost of medicine by obtaining gratuitous treatment at dispensaries.

Mr. Askenden (Hastings) will find the announcement in THE LANCET of Aug. 22nd, page 370.

S. P.—Light suppers and a quiet mind.

"AN ABNORMAL HEN'S EGG."

To the Editor of THE LANCET.

SIR,—My partner, Mr. Byerley, met with an occurrence similar to that mentioned by "Medical Student" in THE LANCET of Sept. 26th, and meeting Professor Huxley soon afterwards asked him for an explanation. "It is very simple," said he. "Reversed peristaltic action takes place in the oviduct after the shell is formed; the egg is driven back, and when again descending gets a coating of yelk, albumen, and shell."

I am, Sir, yours truly,

Egremont, Cheshire, Oct. 9th, 1885. A. CRAIGMILE.

THE PREVALENCE OF HYDROPHOBIA.

To the Editor of THE LANCET.

SIR,—In to-day's issue of THE LANCET, page 672, allusion is made to the prevalence of hydrophobia. In December, 1881, page 1070, you inserted a scheme of the treatment of this fearful disease; but, so far as I can learn, no case has yet been treated as therein suggested. Could you induce any gentleman to give such treatment a fair trial, I should be very glad. I am, Sir, yours obediently,

Boundary-road, N.W., Oct. 10th, 1885. RICHD. NEALE, M.D.Lond.

ERUPTION FROM ANTIPYRIN.

DR. J. H. FRUITNIGHT, writing in the New York *Medical Record*, confirms the testimony previously given by Dr. A. A. Smith, that antipyrin may cause a cutaneous eruption. He quotes from the records of the North-Western Medical and Surgical Society of New York as follows: "Antipyrin was administered to two patients afflicted with acute phthisis. In one case a fine papular, itchy eruption showed itself, similar to that which sometimes appears in persons taking quinine, and which disappeared when the medicine was discontinued. In both cases perspiration was very profuse."

E. M. S.—"The sinew which shrank and which the children of Israel eat not of" is the ischiatic plexus of nerves and its ramifications from the pelvis to the foot.

Medicus is referred to THE LANCET of Aug. 8th last, page 276.

TREATMENT OF HYPERPYREXIA.

To the Editor of THE LANCET.

SIR,—An interesting article appears in your issue of the present date, from the pen of Dr. Mackey of Brighton, relative to antipyretic treatment in a case of broncho-pneumonia by means of a warm bath at a temperature lower than the body, as recommended by Meymer in his article on Typhoid Fever. It would appear, however, that the abstraction of heat was sudden, and not maintained, which, together with even the small exertion necessary in using a bath, must somewhat tend to exhaust and weaken if used frequently. The few cases in which I have used Hooper's water-bed for the same purpose appeared to me so satisfactory that I would fain again call attention to the method.

In a severe case of erysipelas, with a temperature over 106° F., I had the bed filled with cold water simply, and a single blanket placed between the patient and the bed. The temperature was quickly reduced to 101°, and it gradually fell until normal. By elevating the bedclothes, the whole body is kept more uniform. In a hospital, where a bed is always at hand, a contrivance to raise the patient by means of the blanket or whatever he might be placed upon could easily be arranged, so as to place more or less non-conducting material between the patient and the bed, or to add either cold or tepid water, as the indications might warrant. In some cases of broncho-pneumonic phthisis with high temperature I have had the patients removed from a feather-bed and placed on a water-bed, and they have always expressed the feeling as being very grateful.

Should anyone else have used a water-bed for the same purpose, I should be glad to know the results. The first time I had recourse to the water-bed was in a case in which the patient seemed to be dying of fever, and my first suggestion of a cold bath was looked upon by the friends with horror. The result, however, proved so gratifying that I feel convinced this method might often be substituted for more severe means, and with less opposition from anxious relatives, and even with more beneficial and more regular effect. At all events, a patient with a temperature ranging from 104° to 106° F., and removed from a feather-bed or woollen mattress and placed on a water-bed, as referred to, will be in a condition more conducive to the chance of recovery.

I am, Sir, yours faithfully,

Hampton, Oct. 3rd, 1885. GEORGE MUNDIE.

HEALTH OF CANNES.

Mr. Philip T. Riddett, Acting British Vice-Consul, asks to be allowed to state that Cannes is, and has been throughout the summer, absolutely free from cholera; that the general health of the town is excellent; and that travellers to Cannes *vid* Lyons and Marseilles are not subjected to fumigation, disinfection, or other inconvenience, at any point on their journey.

Dr. Chapman.—Next week.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Braxton Hicks, London; Dr. A. Duncan, Glasgow; Dr. Burdon-Sanderson, Oxford; Dr. G. Wherry, Cambridge; Messrs. Smith and Son, Dublin; Mr. Russell, Liverpool; Mr. Cooper, Kensington; Messrs. Savory and Moore, London; Mr. Box, Sutherland; Messrs. Woolley and Co., Manchester; Mr. Davies, Chelford; Dr. Cooper, Colchester; Dr. S. Doyle, Christchurch, N.Z.; Messrs. Latimer and Co.; Dr. Donaldson, Nethben; Mr. Turner, Colchester; Mr. Sampson Gamgee, Birmingham; Messrs. Johnstone, Edinburgh; Mr. Walter Fowler; Prof. C. Tropea, Naples; Lieut.-Col. Lane, Bexhill; Messrs. Essinger and Co., London; Dr. Dingley, Wolverhampton; Dr. C. J. Cullingworth, Manchester; Mr. A. G. Klugh, London; Mr. J. F. Little, Ben Rhydding; Dr. Robert Fowler, London; Dr. Saundby, Birmingham; Dr. R. Neale, London; Mr. C. J. Bond, Leicester; Mr. Craigmile, Egremont; Mr. S. H. Carter, Lucknow; Mr. N. E. Davies, Sherborne; Dr. Drieberg, Edinburgh; Mr. H. W. Jones, Ilford; Mr. C. Williams, Norwich; Mr. Reginald Harrison, Liverpool; Mr. Elkerton, London; Dr. Hett, London; Mr. Rivington, London; Mr. Hearnden, Sutton; Dr. J. S. Mackay, Huelver; Mr. Jordan Lloyd, Birmingham; Mr. T. Holmes, London; Dr. Kirk, Partick; Mr. Solomon Smith, Halifax; Dr. Tuckey, London; Dr. Nichols, London; Prof. G. Buchanan, Glasgow; Mr. Falkiner, Dublin; Mr. Holroyd; Mr. Pick, Sydenham; Mr. Winckworth, Brighton; Mr. Kirkby, Leeds; Mr. R. Freeman, London; Messrs. Longmans and Co., London; Mr. Marrett, Truro; Dr. Thurnam, Yardley-Hastings; Mr. Radley; Mr. Russell, Liverpool; Mr. Swain; Mr. Farmer, Bridgwater; Messrs. Wrigley and Son, Manchester; Dr. Juler, London; Messrs. Kirby and Co., London; Mr. Page, London; Mr. Hughes, Lewes; Messrs. Bell and Co., Edinburgh; Dr. Stewart, Glasgow; Messrs. Maclachlan and Co., Edinburgh; Mr. Barron, Ancoats; Mr. Alden, Shirley; Mr. Johnson Smith, London; Mr. R. Freeman, London; Dr. Cheadle, London; Dr. Craig, Llandudno; Mr. Atkinson, Surbiton; Mr. F. K. Green, Bath; Mr. Field, London; Mr. Austin, London; Mr. P. J. Jackson, London; Dr. Frankland, London; Mr. E. M. Beal, London; Mr. B. Thornton, Margate; Mr. Paulson, Loughborough; Mr. Dartnell; Mr. Spencer Thomson, Torquay; Double Fives; Sleep; Matron, Stafford Infirmary; Beta, Manchester; M.B., Halifax; Justice; Chirurgeon; A. F.; Verus Amicus.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Griffiths, Llanelly; Mr. Collins, Saxmundham; Mr. Hope, Bedford; Mr. Ross, Edinburgh; Mr. Evans, Llanfyllin; Mr. Cripps, London; Mr. Trevor, Beaumaris; Messrs. Bewley and Co., Dublin; Messrs. Benson and Co., London; Dr. Lester, West Ham; Dr. Tetley, Keighley; Mr. Hein, East Peckham; Mr. Heywood, Manchester; Messrs. Johnstone and Co., Huddersfield; Mr. Moullin; Mr. Turner, Colchester; Mr. Wilson, Southsea; Mr. Middleton, Watford; Mr. Robbins, Bourn; Mr. Iles, Taunton; Mr. Holtby, York; Mr. Green, Ripon; Miss De Luttichau, Holloway; Mr. Aston, Bath; Mr. Roberts, Edinburgh; Dr. Eberle, Thirsk; Messrs. Edmunds and Co.; Mr. Dickson, Leeds; Rev. E. Page, Torquay; Mr. Stilliard, Birmingham; Mr. Saunders, Camden Town; Mr. Ross, Edinburgh; Mr. Court, Staveley; G., Ashnough; Medicus, London; Medicus, Farnworth; T. C.; Secretary, Guest Hospital; Medicus, Long Eaton; Medicus, Wavertree; Medicus, Wolverhampton; Matron, Newark Hospital; M. P.; Nurse, Chesterfield; A. B., Bradford; M. J. H.; L.R.C.P., Bedford; Medicus, Bishop Auckland; B. J.; M.D.; L.R.C.P., Brixton; X. M., West Mersea; C. H. M.; M., Staveley.

Manchester Examiner, Manchester Courier, Brighton Herald, Insurance Record, Hyères Journal, North Wales Chronicle, Church of England Temperance Chronicle, &c., have been received.

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